FEBRUARY, 1964

AIRFIX magazine

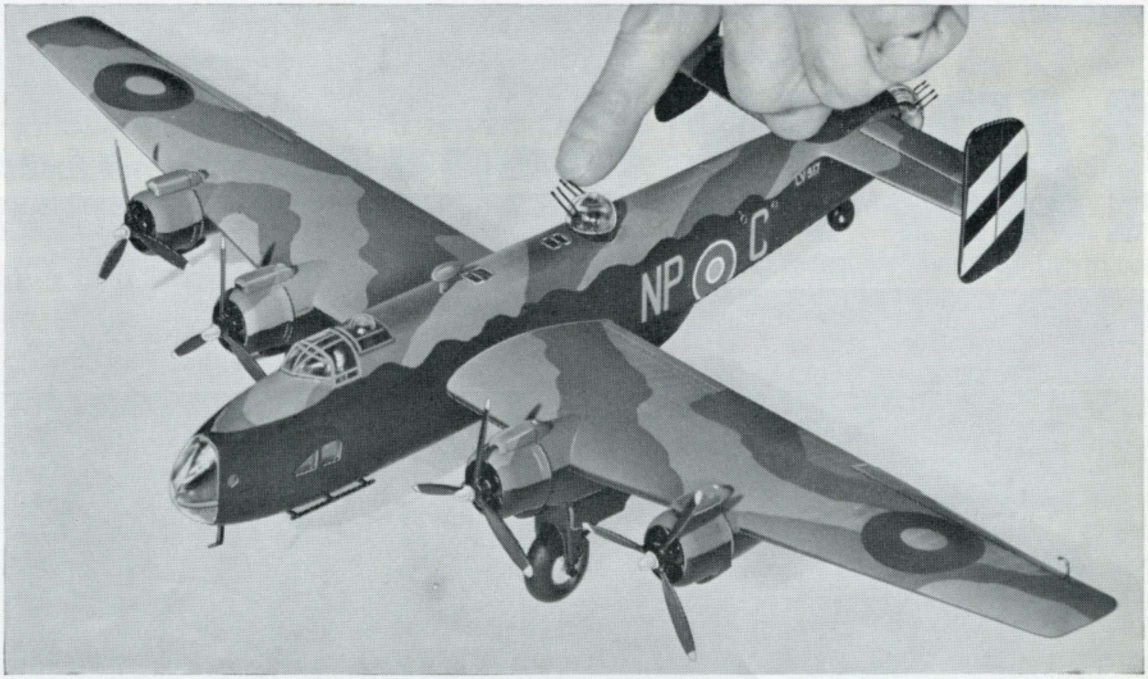
FOR PLASTIC MODELLERS

MONTHLY 1/6

IN THIS ISSUE

Building a 1:72 scale seaborne Swordfish

Airfix Scarab conversions, old and new



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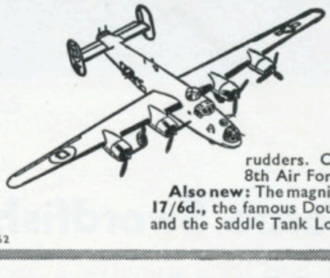

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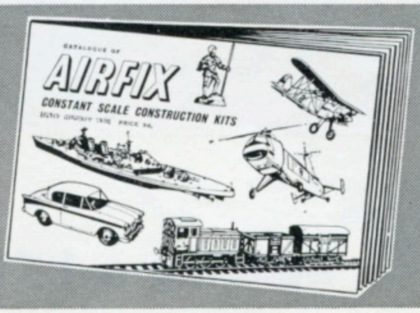

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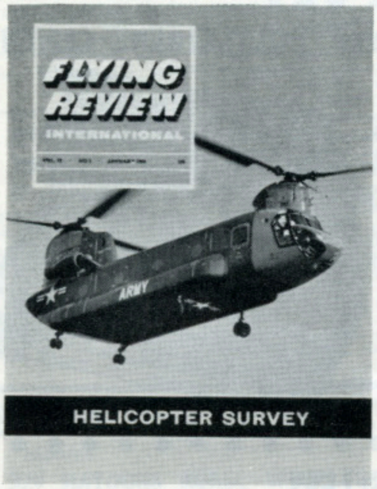

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AIRFIX magazine

FOR PLASTIC MODELLERS

Volume 5, Number 6 **February, 1964**

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COVER PICTURE

'The Gradient'. To record the last of an era—a Mallett locomotive on a heavy freight drag in the United States. Our splendid front cover illustration is taken from an original oil painting (48 in x 33 in) by ace-artist Terence Cuneo, and is reprinted from Visual, published by Ilford Limited.

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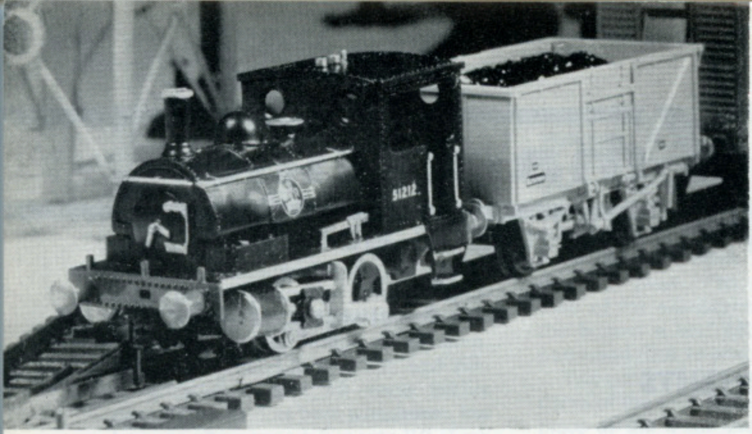


NEWS FROM AIRFIX

The world's greatest value in construction kits

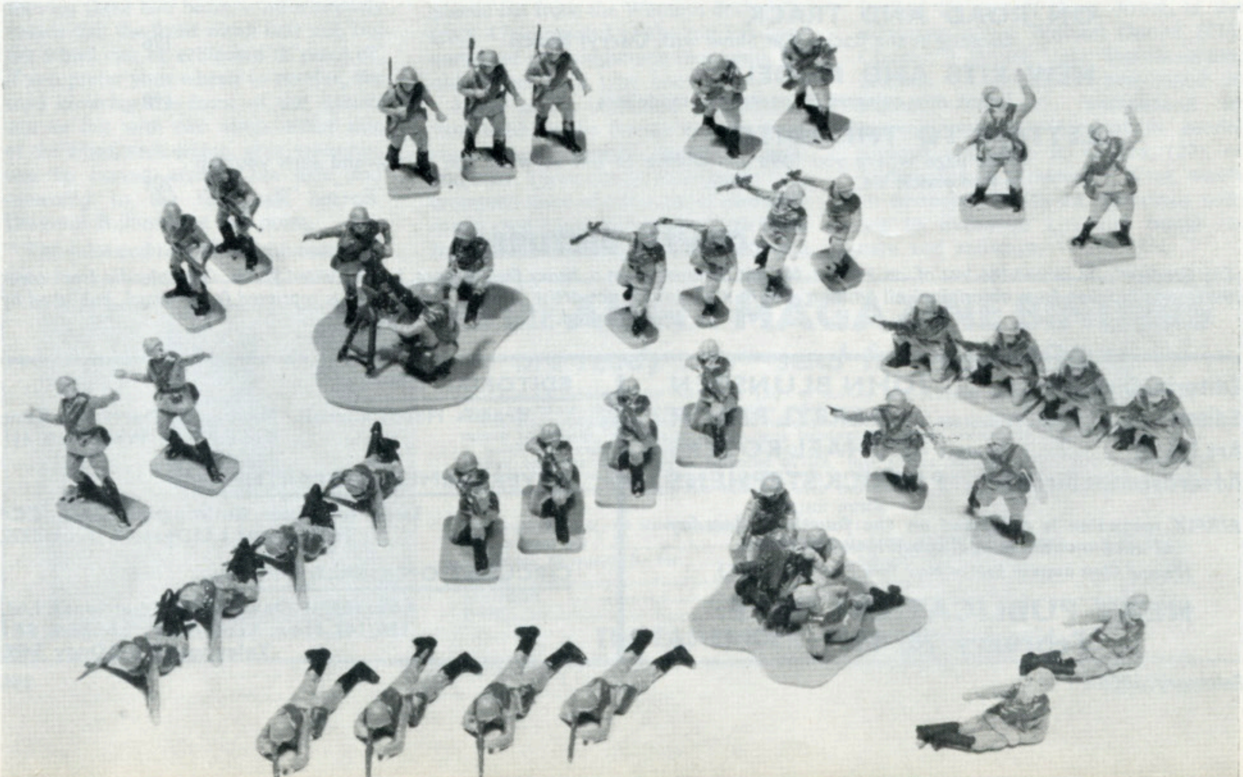
0-4-0 SADDLE TANK AND RUSSIAN INFANTRY SET

AIRFIX have followed up last month's introduction of a J94 0-6-0 Saddle Tank locomotive with an OO/HO guage kit of its smaller counterpart, the 0-4-0 Saddle Tank. Once a familiar sight in shunting yards and docks, this type of locomotive is fast being replaced by the more efficient and more comfortable diesels. This 'ugly duckling' of steam locomotives will not be allowed to disappear completely, however, for in model British Railways (LMR) form it will be with us for a lot more years yet.

The 0-4-0 kit joins the Drewry Shunter and other wagons in the Airfix Rolling Stock Series 1 range, priced at 2s each. It comprises 43 parts (plus assembly and painting instructions, and a four-part colour transfer sheet) and, as with all these re-issues of the former Kitmaster models, can be assembled either as a working model or as a scale replica for the show-case. For this purpose, two different sets of couplings are included—scale three-link, or standard Airfix 'buckeye'.

Detail on this little model is pleasing, and virtually everything featured on the prototype has been faithfully reproduced. The moving parts are particularly worth mention, as careful assembly, closely following the instructions, allows the miniature coupling rod gear to work in a most

Above: *The new Airfix* 0-4-0 *Saddle Tank kit costs 2s, and has* 43 *parts that assemble into this accurate replica.* Below: *Added to the Airfix range of HO and OO scale military figures is this* 48-*part set of Russian Infantry which costs 2s.*



satisfactory manner. Rivet detail is reproduced on the plating, and the cab interior has a host of features, including regulator handle, handbrake and safety valve stems.

The 0-4-0 Saddle Tank locomotives were designed by Mr J. A. F. Aspinall, Chief Mechanical Engineer of the former Lancashire & Yorkshire Railway, and first built at Horwich Works in November 1891. Weighing 21 tons 5 cwt in working order, and with a tractive effort of 11,335 lb, they were intended for use in shunting yards and in the docks connected to that railway.

There have been, of course, many hundreds of other small 0-4-0 tank locomotives of different designs, employed not only on dock shunting, but also at blast furnaces, steel mills, mines and other industrial plants. One of the main features of this type of design is its short wheelbase, which enables these engines to negotiate the sharp curves on the cramped tracks where they have to operate.

LATEST OO SCALE SOLDIERS

LATEST recruits to the growing Airfix HO and OO scale military ranks is a band of 48 soldiers and weapons of the World War 2 Russian Infantry, selling for 2s. This latest set, like others in the range, is suitable for use with the Airfix HO and OO scale trackside and fighting vehicles series, and for the first time includes 'set pieces', in the form of a mortar team and a machine gun team—both with their own bases. The bases feature a number of small holes, each with key letters, which are correspondingly repeated on the appropriate figures as an aid to location.

The 48 pieces in this set comprise the following items:—mortar base, barrel, tripod and team NCO, machine gun base, bogie, loader, team NCO and machine gun (one of each); officers, NCOs pointing, grenade throwers, wounded riflemen, riflemen at high port, rifleman on guard, mortar team loaders, and machine gunners (two of each); three riflemen walking; and four each of riflemen laying firing, kneeling firing, and crawling, and sub-machine gunners running, and kneeling.

The figures are complete, with the exception of painting, and carry a wealth of fine authentic detail.

NEWS FROM BPMS

OWING to pressure of business, Mr F. A. Brown has found it necessary to resign as Secretary of the British Plastic Modeller's Society. This post is now being held by Mr Roger R. Wainwright, of 23, Chadville Gardens, Chadwell Heath, Romford, Essex, to whom all enquiries and correspondence should be addressed. The Society is also delighted to welcome as President Mr W. J. Mathews, who writes the 'Model Talk' column in *Flying Review International*, and will also serve on BPMS's panel of specialists covering civil aviation and lesser-known foreign colour schemes and markings. Mr Peter Elley, founder of BPMS, is now acting as Treasurer.

Recently, several restricted sources of information have been put at the Society's disposal for the benefit of members desiring more authentic colour and fitting detail, and the advisory service is being kept very busy with members' ideas and requests for information. It is the Society's proud boast to date that it has been able to satisfy even the most critical modellers by return of post. Membership is steadily increasing, both at home and overseas. Have you sent for your copy of the current BPMS 'Newsheet' and enquiry forms yet? *R.C.J.*

NEW BOOKS

Tramway topics

THE TRAMWAYS OF WOOLWICH AND SOUTH EAST LONDON, *by 'Southeastern'. Published by The Light Railway Transport League, 245 Cricklewood Broadway, London, NW2. Price 35s.*

THIS book is the joint work of five authors, three of whom were members of the 'Southmet' team who wrote 'The Tramways of Croydon'. This second volume in the series of detailed histories of the tramways of London is typical of the painstaking thoroughness of all The Light Railway Transport League's publications.

The very early days of transport history in the district are surveyed in the first chapter, followed by four chapters dealing with the LCC, Erith and Bexley UDC and Dartford Council Light Railways. Joint committee working of the last two councils is dealt with in a chapter and another covers the London Transport period. Finally, there are two chapters surveying rolling stock and equipment, and fares and tickets. Modellers will greatly appreciate the table of rolling stock dimensions contained in one of the four appendices.

A really generous selection of photographs, all now of considerable historical interest, are interspersed throughout the book at appropriate points in the text, thereby helping to make the book so much more enjoyable and extremely useful as a reference volume. The historical value of the book is beyond measure, and it is excellent value at 35s.

Miniature motoring

MODEL CAR COLLECTING, *by F. Brian Jewell. Published by Temple Press Books, 42 Russell Sq, London, WC1. Price 15s.*

IT is a fair bet that since the introduction of die-cast miniatures nearly all of us have at some time or another, either as children or as grown-ups who have succumbed to the fascination of a particular model, collected model cars. Like collecting of any sort, be it stamps, butterflies or cigarette cards, there is more in the game than at first meets the eye.

As collectors of miniatures ourselves we were greatly interested in Brian Jewell's book and have not found it wanting. He surveys the beginnings of the mass-produced model car industry and recalls many long-forgotten makes of the inter-war and post-war periods. There is, for example, a complete list of pre-war Dinkys.

Subsequent chapters describe how die-cast miniatures are made, how they can be collected by grouping them under various headings (such as antique vehicles, sports or racing, or battlewagons) and how they can be modified or restored. As an example of what can be done, there is a wealth of information showing how racing car miniatures can be modified to portray particular cars as seen on the GP starting grids of 1961-62.

An interesting chapter on standards describes a formula which can be applied to measure the accuracy of models. The heart-breaking topic of the variety of scales is also discussed. The author pays great attention to the subject of scale when discussing a particular model and a lot of useful information is contained on this aspect Slot racing is mentioned and an exciting glimpse of the future is given in a description of a 1:32 scale circuit the author saw demonstrated where model cars were controlled freely without a slot. Appendices giving a list of model car manufacturers, enthusiast's clubs and societies, conversion scales and a host of photographs complete the book.

Work for the WRAF parachute packers. Paratroopers under training jumping from an RAF Transport Command Hastings at RAF Abingdon recently.

IN THE AIR

by Alan W. Hall

DID you realise that the Royal Air Force uses some 600 parachutes a day? Even in these times when the number of operational aircraft in the Services is much smaller than, shall we say, ten years ago, the demand for parachutes is much greater. After a moment's reflection it is easy to see how this comes about. High-speed jets require braking and drag chutes to retard their speeds on landing, and the job of packing these essential pieces of equipment still falls to the women of the WRAF, as I learned when I visited their depot at RAF Upper Heyford, recently.

Not only do RAF Fighter and Bomber Commands require parachutes, but the men of the airborne forces also need them for basic and continuation training in the United Kingdom and for large exercises and operations in all overseas commands. The original close relationship between the WRAF parachute packer and the airborne soldier, which arose during the war, has been maintained, unbroken, for over 20 years. Since the war the use of parachutes for dropping supplies has developed considerably and, while the size of these parachutes precludes their packing by the WRAF, the girls are actively concerned with the repair and maintenance of them.

The activity of a WRAF parachute packer need not end with the packing of parachutes. Many of the girls, curious to know what happens when the parachute goes to the soldier, have recently been able to make descents alongside the men at their training school at RAF Abingdon. Following the normal pattern of training, the girls go through the airborne soldier's course at the school and take part in all the preliminary exercises that have to be passed before the great day of actually making a free-fall comes round.

In the usual way the first drop is made from a static balloon from a height of about 800 feet, and I saw six WRAF girls make their first attempt, together with a number of airborne soldiers. This training and dropping side by side with potential paratroopers gives a sense of purpose to the girls in their work, and the presence of the girls is commented upon very favourably by their male companions. The added confidence achieved, not only by the soldier, but by the girl who packs his parachute, is considerable.

COMPLETED AT COWES

The world's largest Hovercraft, the Westland SRN3, has been completed at Cowes and is now starting an intensive series of trials before handing over to the Interservices Hovercraft Trials Unit at Hamble. The 37½-ton vehicle has been ordered by the Ministry of Aviation for evaluation purposes.

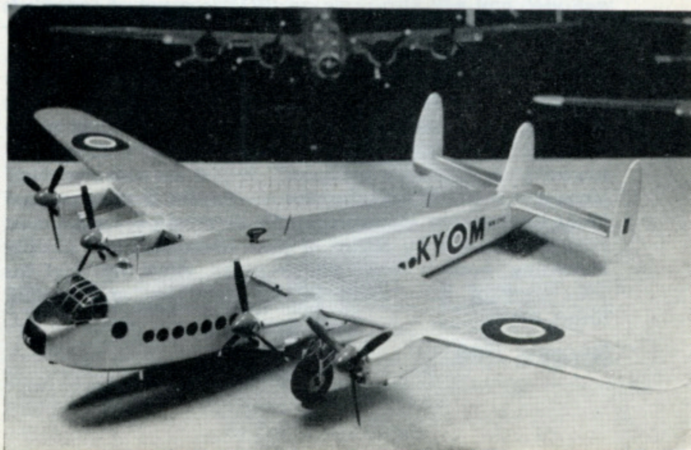
PROVOST MARKINGS

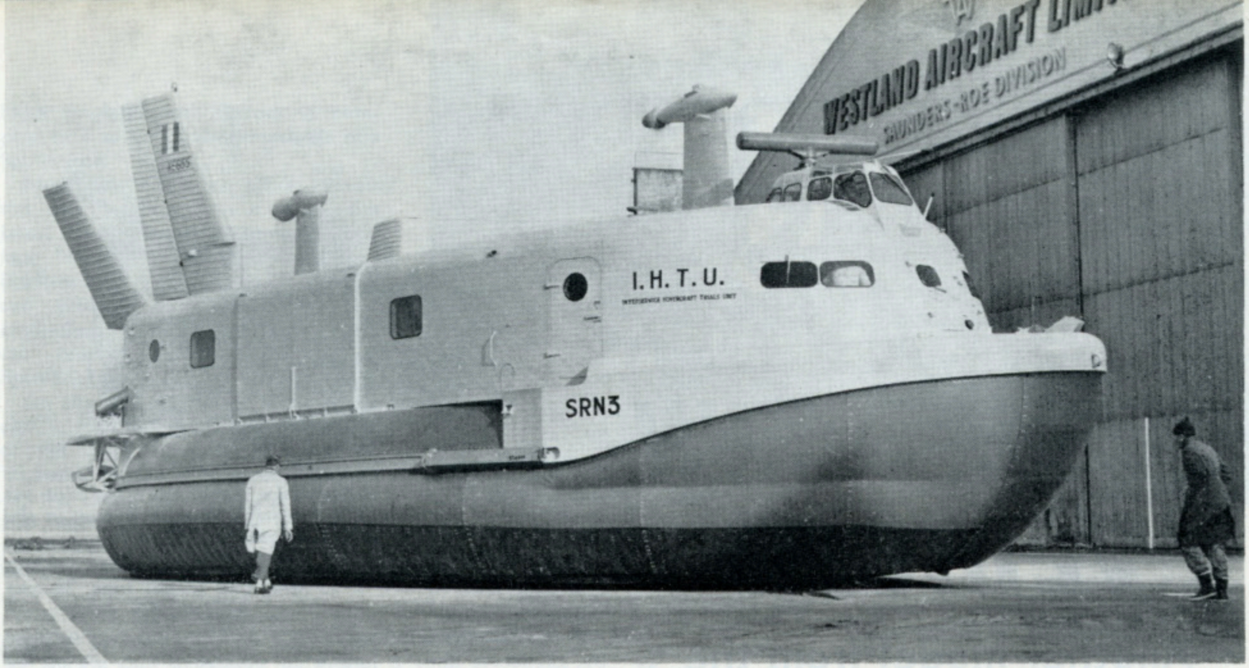
One of the least talked about aircraft in RAF service has always been, to my mind, the Jet Provost. It has been exported to Ceylon, Kuwait, Sudan and Venezuela, both as a trainer and in its armed version. From the original Mark 1 which first flew on June 26, 1954, it has been in continuous production at the Hawker Siddeley factory at Luton and was the first jet trainer in the world to be used for initial flying training.

Operating at heights above 25,000 feet, the 'JP' is an excellent aircraft to fly. Its all-round vision and excellent forward view, plus the roominess in the two place side-by-side seating arrangement, make it an ideal aircraft for its purpose, as I can testify through having had my hands on one recently.

Airfix make their own model of the T3 version and provide rockets in the kit for conversion into the armed aircraft with which the air forces of the Sudan and Venezuela are equipped. My photographs this month give an idea of the marking of these variants and they make a very useful addition to a model collection, providing you don't mind turning your hand to painting the different insignia. The top picture of the Ceylonese Jet Provost should be the easiest. The fin marking is red and yellow, the fuselage has a red outer circle, yellow centre and orange and green bars. Serial numbers are in black.

The Kuwait aircraft shown next has a slightly more difficult roundel to reproduce, as it consists of four colours. The outer circle is green, next white, then red, and finally,





the centre in black. Recent observations at Luton reveal that several ex-RAF machines are being re-furbished for use by the Sudanese Air Force. Of these, two recent changes of colours were on WV533, now 106, and WV620 which has become 107.

PROVING THE VC10

Initial experience with the VC10 flying on typical BOAC routes has shown an excellent standard of reliability and serviceability. Since the overseas route-proving programme began on October 17, the aircraft has averaged more than 8.2 hours in the air every day, excluding a period for routine maintenance. The proving programme is being flown by G-ARVF, the fifth of 12 standard VC10s for BOAC. It is intended to occupy approximately 1,000 hours in flying under typical service conditions.

Up to December 9, the VC10 had flown 364 hours on overseas flights and a further 72 hours on local crew training at Heathrow. The aircraft underwent a routine maintenance check plus certain modifications during the rest of December, and further proving flights to Africa began early in January. These will be followed by a series of transatlantic crossings to Montreal, Toronto and Vancouver for cold weather experience.

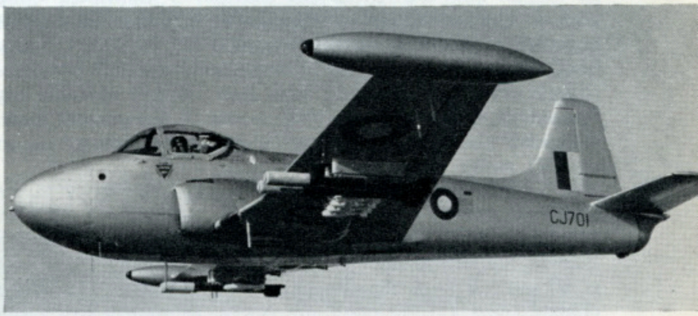
Total flying hours on all of the VC10s up to December 16, 1963, was 2,051 in 862 flights. Contributing to this total were the seven aircraft of the BOAC fleet and G-ARTA, the original VC10 owned by the manufacturers. Two of the BOAC aircraft 'VG and 'VH are now at Shannon Airport in Ireland, where BOAC crew training has started.

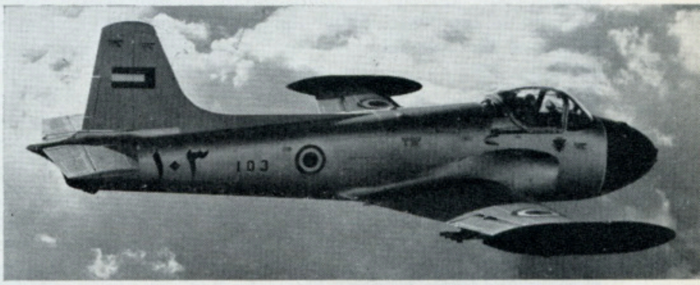
CONVERSION, NOT KIT

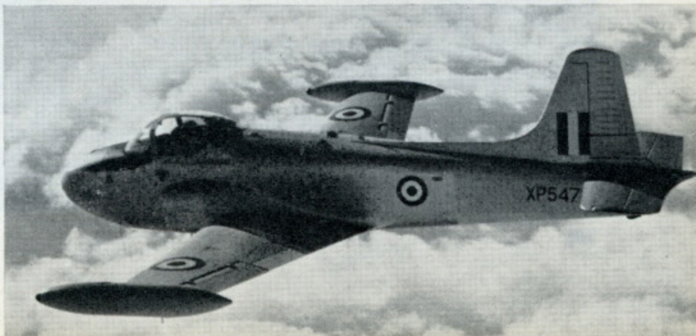
I have had several letters from correspondents asking where they might get the kit of the York which appeared in the photograph illustrating canopy decoration in the October issue. Unfortunately for them, this aircraft was not a kit as they supposed. It is, in fact, a conversion from the Airfix Lancaster and will, I hope, be the subject of a special article later this year. The actual model is illustrated on the opposite page.

Left: *Not a kit, as many supposed, but a conversion of the Airfix Lancaster into a Transport Command Avro York.*

Above: *The Westland SRN3 Hovercraft, which is undergoing trials on the Solent prior to being handed over to the Interservices Hovercraft Trials Unit.* **Below:** *The Jet Provost in different guises.* **Top:** *the Ceylonese version of the aircraft displays an underwing load of four rocket projectiles and light bombs.* **Centre:** *the Kuwait Jet Provost T51.* **Bottom:** *One of the many T Mk 4 Jet Provosts in RAF Flying Training Command.*







Military modelling

by C. O. ELLIS

A HEAVY BREAKDOWN VEHICLE

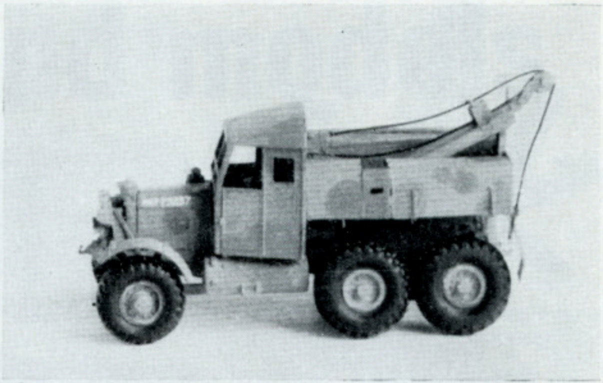
Another model from the Airfix tank transporter kit

ONE particular Army vehicle often suggested as the subject for an Airfix kit is that useful item the breakdown truck. However, those who wish to add one of these to their miniature 'Field Workshops' equipment, need look no further than the Airfix tank transporter kit which, along with a small quantity of Plastikard, furnishes all that is required to make a model Scammell SV/2S 6 x 4 heavy breakdown vehicle. Issued in large numbers to REME recovery units during World War 2, a number of these big Scammells still survive in civilian use at the present time, thus also giving the model quite an appropriate place on an OO gauge model railway layout.

A look at the pictures shows a marked similarity to the artillery tractor described in last September's AIRFIX MAGAZINE and, in fact, both vehicles shared a common chassis. So before any assembly takes place, the first task is to shorten both the transmission unit (part 21) and the chassis (part 15) by chopping out a 10 mm length from the middle, as described in the previous article. The rear halves of the cab sides and roof are also cut or sawn off, as is the rear half of the seat unit (part 5)—this needs to be cut really close up against the front seats, otherwise the cab back will not fit squarely in place. The template in diagram A gives the shape and size of the cab back, and once this has been cut from Plastikard the chassis and cab can be assembled up to stage 23 in the instruction sheet, omitting only stages 6 and 8. Then find part 8 in the kit and cut off the semi-circular winch moulding; this is cemented to the lower part of the cab back below the line shown dotted on the template.

PLATFORM STRUCTURE

Now comes some scratch modelling in Plastikard, made extremely easy by the fact that all the parts involved are rectangular. General arrangement is quite clear from the photographs, and I have also given a sketch (diagram C) showing the layout of tool lockers and jib supports on the platform. Dimensions for all the parts are as follows:—



The completed model breakdown truck; note the slot cut in the access door for a 'hand grip'. The jib is seen in the outer position.

Platform floor, 36 mm x 31 mm; tool locker sides, 36 mm x 9 mm; rear, 31 mm x 10 mm; tool locker tops, 36 mm x 10 mm.

Note that the left-hand side is divided into two sections by an access door 6 mm wide situated 8 mm aft of the cab, and thus a 'gap' must be cut in the left-hand side components before assembly. All parts should also be scored at 2 mm intervals to represent the planking—lengthways for the sides and rear, and crossways on the locker tops. Use a set square to ensure a nice true assembly, building up the lockers on the platform floor; stripwood inside the corners is a useful aid to rigidity, though this is largely a matter of choice.

Jib components come entirely from the tank transporter kit, arranged as shown in the plan view in diagram C. On the real vehicle the jib arm runs on rollers in a runway and is wound by hand between an outer position—where the safe working load is two tons—and an inner position where the swl is three tons. Very sturdy legs, like an inverted 'V', support the outer end of the runway and a couple of cross-members from part 58 are suitable for these, cemented in position such that the apex of the 'V' is 3 mm above the top of the sides. It only remains to point out that the ends of all parts used must be trimmed and chamfered where necessary to ensure that everything butts neatly into place. The runway itself is made from the two long arms of part 59, cemented together flange to flange. A template for the angled jib-head is given and a slice of sprue does for the pulley wheel. Another slice of sprue is required as a drum on the hand-winch behind the cab, with a wire 'handle' fitted to the left-hand side.

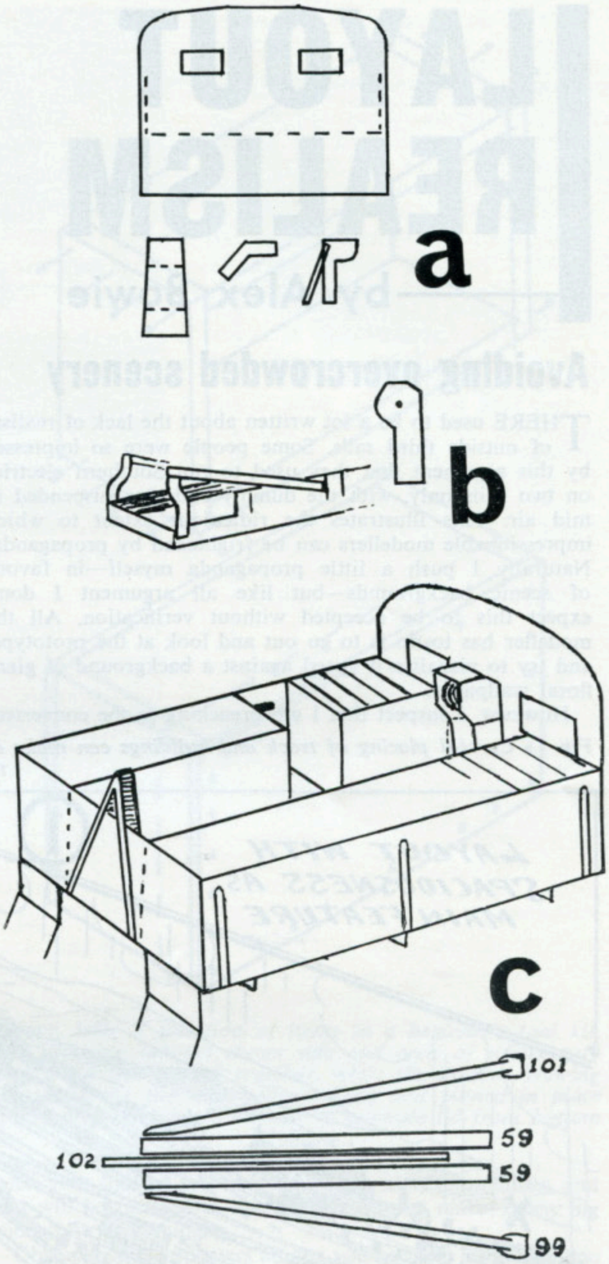
A bracket, shaped like an inverted 'U' is fitted across the runway, after which the whole lot can be rigged with cotton—one length from the hand-winch led over the pulley wheel and given a wire 'hook', and another length from the jib-head to the base of the winch. Three strips of Plastikard, each measuring 31 mm x 1 mm, are required under the platform floor as lateral supports and painting can then be carried out while the chassis and underside of the jib platform are still readily accessible.

Having arrived at this stage the time has come to 'marry' the jib platform to the waiting chassis. The winch moulding on the cab back supports the front end and 2 mm strips of Plastikard, arranged as shown in diagram B, support the rear end. By slightly adjusting the radius of the curved uprights with tweezers while the cement is drying, the platform can be made to sit perfectly level. All that remains are the mudguards and the counterweight in front of the radiator; a piece of scrap plastic serves as the 'weight', but if you intend to actually tow diecast model cars, something more substantial, like lead shot inside the bonnet, is also required to prevent the front wheels leaving the ground in a rather undignified way! Such items as the towing bar, tools, spare wheel, strapping and so on are obvious from the photographs, and time spent in 'super detailing' is well rewarded by the attractive appearance of the finished model.

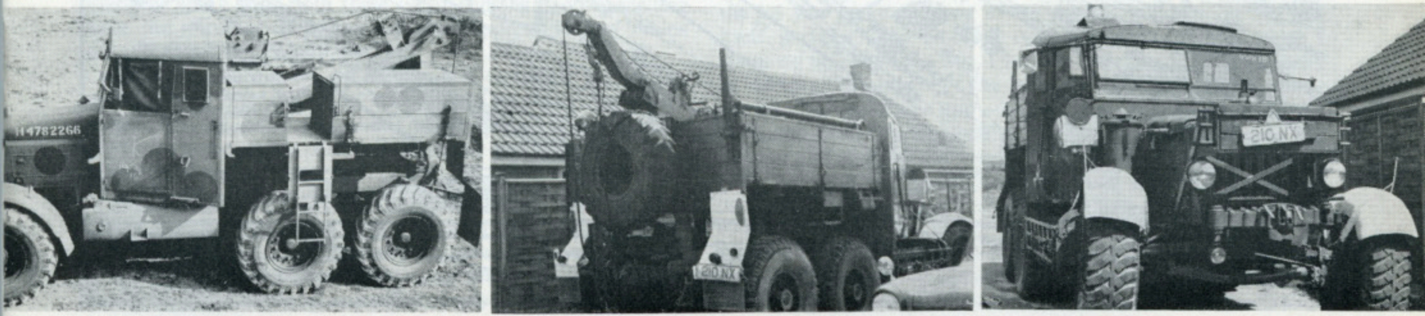
Sample WD numbers of Scammell breakdown vehicles included H4500757, H4752372, H4782266, and H4782487. Like the tank transporters, they often carried amusing names; one such vehicle in the Sicily campaign, for instance, was embellished with the legend 'Boys from Syracuse', painted above the windscreen. This name was flanked by the 8th Army formation sign.

CIVILIAN VERSIONS

Ex-WD Scammells of this type, as mentioned earlier, are still to be seen in civilian service. The vehicle illustrated is, in fact, in daily use at a service station just outside Birmingham on the northern end of the M1. Finish is in dark blue with white roof and mudguards while, in common with all motorway service vehicles, an amber beacon is fitted on the roof; I suggest that a small bead might be suitable for this modification. While on the subject of ex-WD vehicles, it is worth mentioning that our old friend the Scammell artillery tractor is also to be seen in civilian guise—a special favourite with travelling showmen and often painted in flamboyant livery. These 'fairground' Scammells sometimes have the tilt removed and invariably carry a diesel generator mounted in the back. The box-vans which they tow are quite simple affairs and one could easily be made up from Plastikard, using wheels and axles left over from the transporter trailer. Thus there are plenty of possibilities here for railway modellers who may not previously have given the artillery tractor a second thought.



Key to drawings: (a) *Templates for rear mudguards, jib head and counterweight brackets (two of each required) and template for cab back.* (b) *Template for hand-winch side plate (two required) and arrangement of supporting struts on chassis.* (c) *Layout of jib platform and plan of jib structure (not to scale—numbers indicate parts utilised from tank transporter kit). The three detail views* (below) *of the prototype Scammell 6 x 4 heavy breakdown vehicle show* (left to right) *the jib in the inner position and access door with folding ladder (photo courtesy of Imperial War Museum); jib in the outer position and optional spare wheel; and counterweight in front of the radiator, and roof beacon fitted to a civilian version.*



LAYOUT REALISM

by Alex Bowie

Avoiding overcrowded scenery

THERE used to be a lot written about the lack of realism of outside third rails. Some people were so impressed by this argument that they used to run Southern electrics on two rails only, with the dummy collector suspended in mid air. This illustrates the ridiculous extent to which impressionable modellers can be frightened by propaganda. Naturally I push a little propaganda myself—in favour of scenic backgrounds—but like all argument I don't expect this to be accepted without verification. All the modeller has to do is to go out and look at the prototype, and try to visualise it posed against a background of giant floral wallpaper.

However, I suspect that I am preaching to the converted, for most modellers prefer to have at least a simple scenic background. Some of the ambitious ones get so absorbed in scenic work that the railway appears to take second place. But that, of course, is strictly their own business.

On my part, I like to strike a medium, with perhaps a bias towards the railway section of the layout. Thus, the greater portion of the baseboard is taken up with track and railway accessories. But even if there is no scenery at all, scenic technique is essential for realism. To appreciate this, let's compare an old-type model railway with the new.

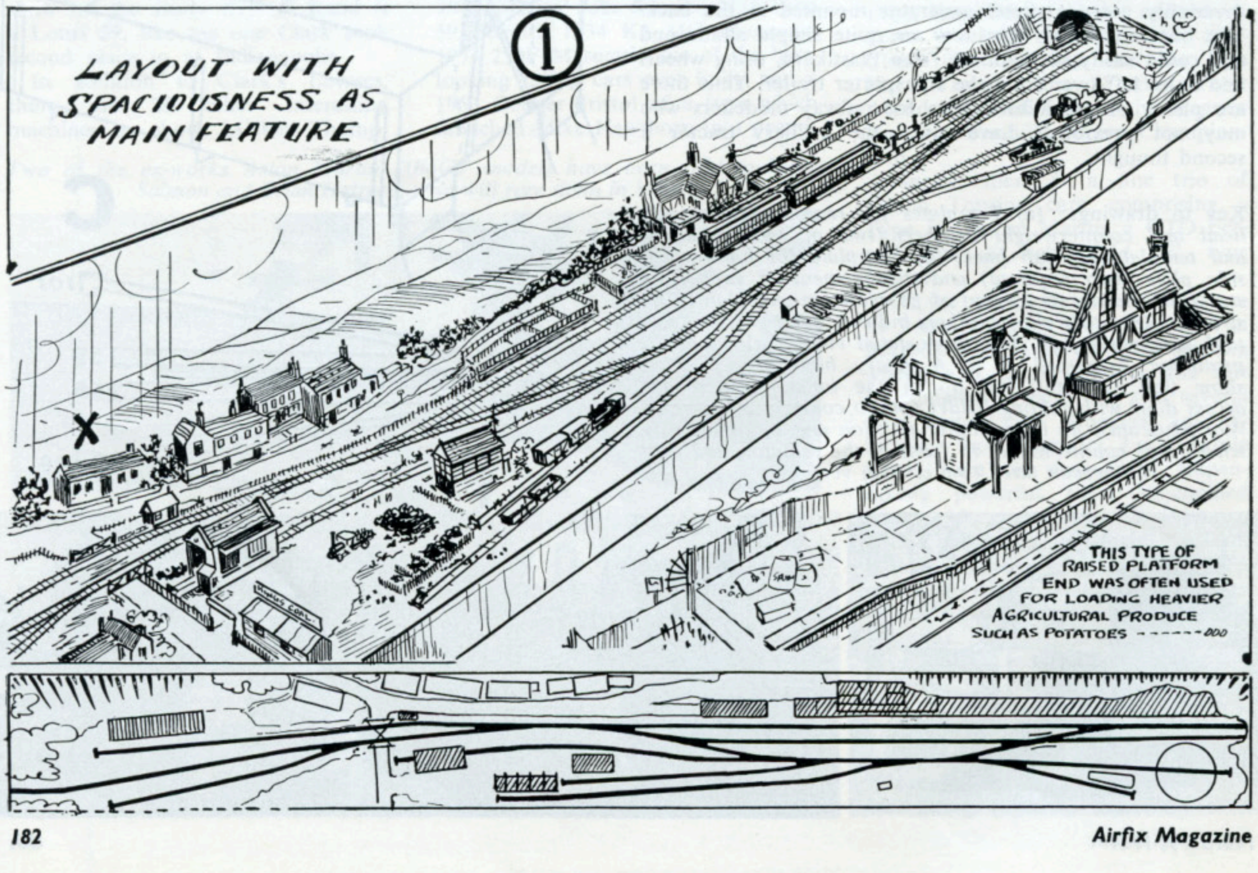
TOO MUCH ON TOO LITTLE

The old-style layout designer got out his pencil and paper with one thought only, and that was to cram as much track as possible on to his baseboard. This was all very well in theory, but resulted in railways which were not only utterly unrealistic in appearance, but quite often were not even good from the operational point of view. A typical model would have dozens of sets of points leading into sidings, sometimes a few inches long, sometimes continued round sharp-radius curves, but almost always spaced ridiculously close to each other.

The scenic worker, on the other hand, designs his track layout with prototype spacings and appearance in mind. Given a small baseboard, there are times when trackwork has to be pruned a bit to give realistic spacings, but this isn't so terrible as all that.

Firstly, the average operator can only handle so much traffic at a time, and any simple layout, provided it's not too simple, can keep him pretty busy for two or three

Fig 1: *Careful placing of track and buildings can make a layout look a lot larger than it actually is. The less 'clutter', the better.*


①
LAYOUT WITH SPACIOUSNESS AS MAIN FEATURE
X
THIS TYPE OF RAISED PLATFORM END WAS OFTEN USED FOR LOADING HEAVIER AGRICULTURAL PRODUCE SUCH AS POTATOES ------ooo

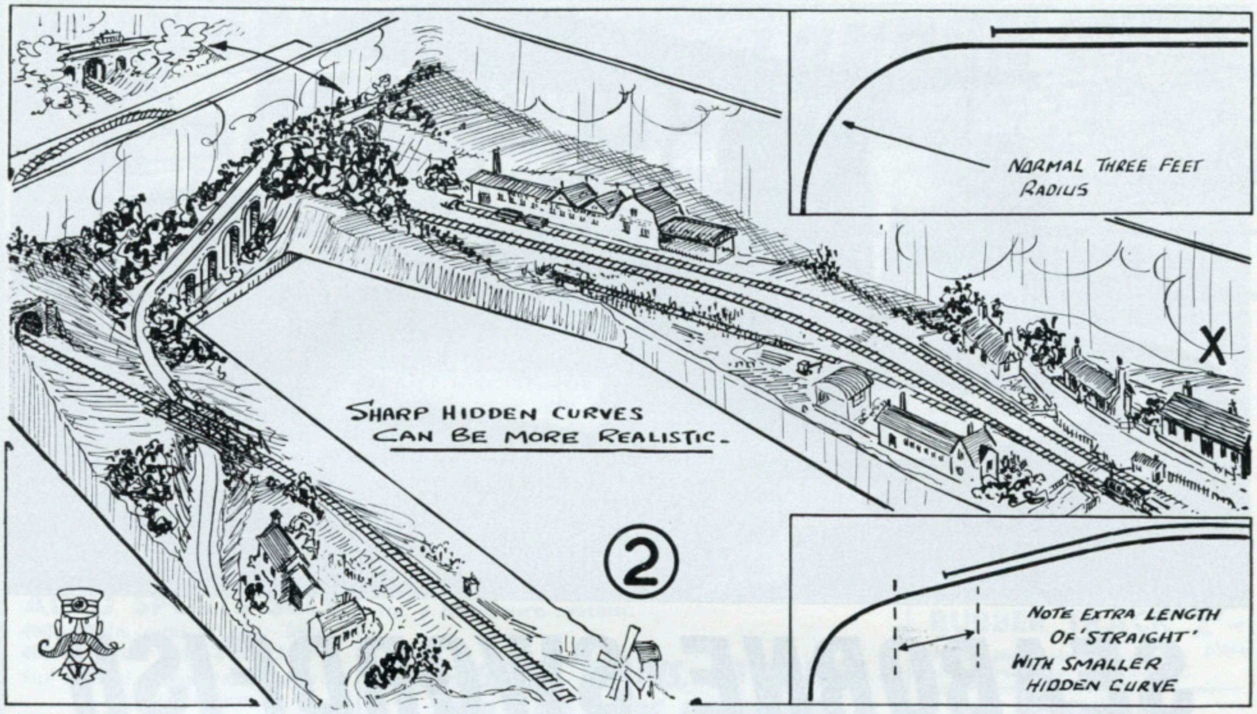

SHARP HIDDEN CURVES CAN BE MORE REALISTIC.
NORMAL THREE FEET RADIUS
X
2
NOTE EXTRA LENGTH OF 'STRAIGHT' WITH SMALLER HIDDEN CURVE

Fig 2: *Not too many buildings—just enough to give life to the scene. Note how the track disappears into the backscene. The two sketches should meet each other at X.*

hours without repetitive movements. Secondly, the discipline imposed by scenic work makes him plan more logically. He prefers a few long, well spaced sidings to a dozen half lengths tucked in odd corners.

FIDELITY OR FUSSINESS?

Now any designer, whether he designs railway layouts or wallpaper, will tell you that a few straight lines will always look longer and more imposing than a mass of fussy detail. And the eye, instead of darting all over the place, is riveted to the main essentials. Thus, if the scenic worker knows his job, he can effectively make his railway *track* look far more like the real thing than the chap who crams every possible piece of track on to a baseboard.

Here we come to the crux of the matter. The most important characteristic of a railway is its length and spaciousness. By eliminating fussy and overcrowded detail of the old type, some of the impression of space and length can be reproduced, and even if there is not one single extraneous building on the layout, it will still look more realistic.

Fig 1 shows a layout 14 ft 6 in x 20 in, in which the background scene is fairly simple. Another 20 inches is added on to make space for a hidden curve of 18 inches radius. Observe that the trackwork is designed to give a long spacious look, and this is helped to some extent by having the tight hidden curves at one end. If of about 18 inches radius, compared with the normal three feet, these will give about 18 inches extra straight on the main baseboard. All of which helps to make the layout look longer than is actually the case.

The curve can either be under a tunnel, behind trees or embankment, or can disappear under a bridge, and into a hardboard back-scene as in Fig 2. Note that there is a tunnel entrance at the station end too, and this may give the illusion that the line continues further.

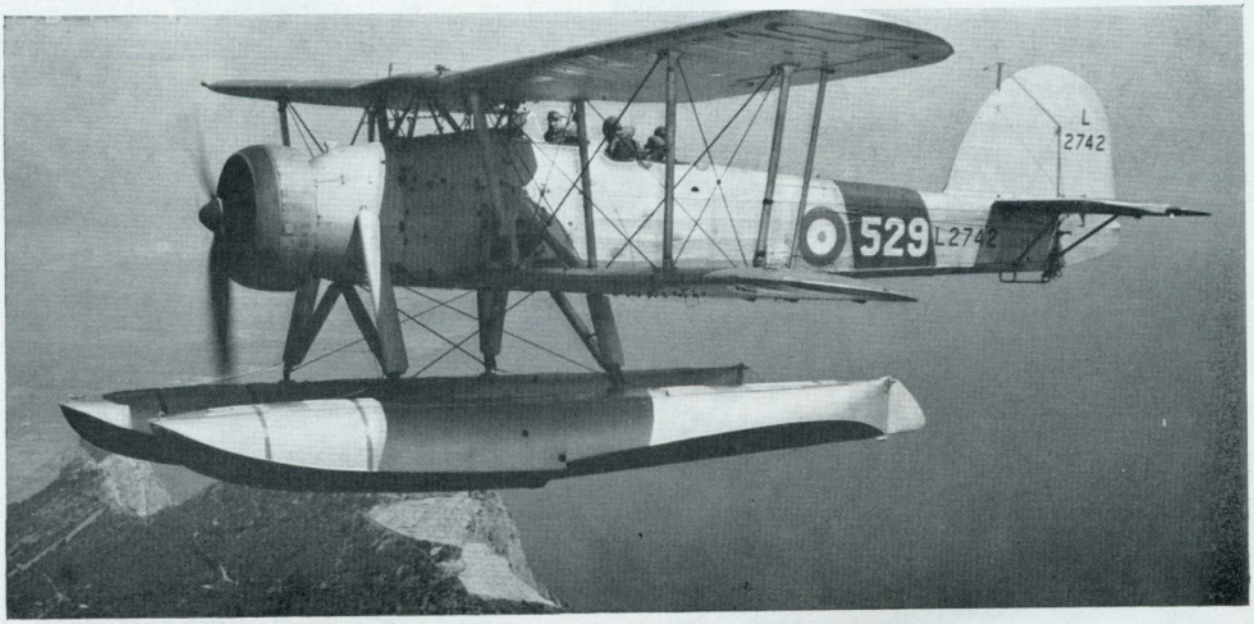
One double slip is shown, though a Graham Farish single slip would do almost as well, and if you total up the track you will find plenty to keep you occupied for months. But having just met an energetic Scot who built a 20 feet square layout in two weeks, I couldn't be dogmatic even about this.

All the same, it is generally conceded that the normal modeller, unfortified by genuine Scots porridge, takes quite a time to build a layout. For this reason, I prefer to work in easy stages, laying out and ballasting the track on the whole length of one side of a room first. This is followed by the station buildings, then by sections of scenic work, completing each section before beginning another.

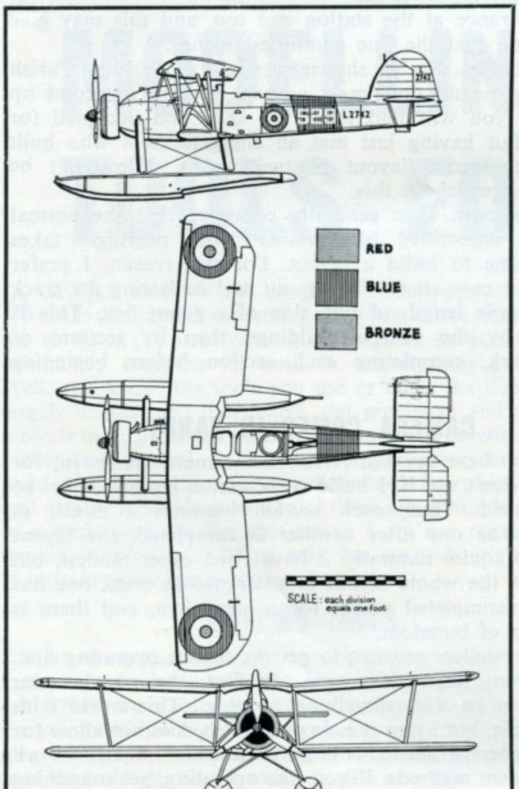
CAMERA COMES IN HANDY

This is where my old friend the camera comes in, for even if I don't use it, I build each section so that it can be photographed. Thus, each section becomes a model in itself, and as one after another is completed, the layout takes form quite naturally. I have tried other models, but frankly, if the whole layout is attempted at once, one has a large uncompleted model for a long time, and there is the danger of boredom.

Some modellers attempt to get the layout operating first, before doing any other work. In fact, the popular war cry used to be 'Get something running'. This works with some people, but again is a dogma which does not allow for individual temperament. It is up to modellers then, to work out their own methods. If you like operating, get something running—but if scenic work is your main interest, complete a section first.



SEABORNE SWORDFISH



Alan W. Hall describes an interesting way to put the 'Stringbag' on floats

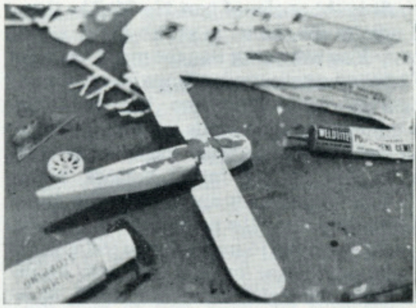
ALL Mark 1 Swordfish produced had the capability of being converted to floatplanes very easily. Not a great number were used operationally during the war, and most of these were assigned to fleet-spotting duties in battleships and cruisers. Nos 701, 702, and 705 Catapult Flights were equipped with Swordfish floatplanes in the Royal Navy and No 202 Squadron RAF operating from Gibraltar used them from October 1940 to January 1942. At the second battle of Narvick, in April 1940, a Swordfish floatplane catapulted from HMS *Warspite* spotted for the guns of the British fleet so successfully that an entire force of seven enemy destroyers and a submarine were sent to the bottom.

Although the Swordfish floatplane had a good war record, I preferred, for this article at least, to concentrate on a pre-war one and found some excellent reference in 'British Naval Aircraft', by Owen Thetford. This shows a photograph of the aircraft from one of the battleships stationed at Gibraltar, and was taken by that ace-photographer Charles Brown in 1938. Unfortunately he could not remember which ship his subject came from, but the photograph, reproduced above, showed all that I needed for the job and that was good enough!

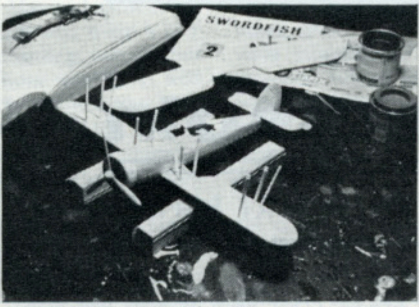
More reference was found in the war-time Penguin paper-back 'Aircraft Recognition', by R. A. Saville-Sneath. This shows a very good side view of the prototype (K5662, third pre-production Swordfish) of the floatplane. William Green's 'Floatplanes', volume six in the Warplanes series, also has a drawing and photograph of the Swordfish floatplane.

CONSTRUCTION

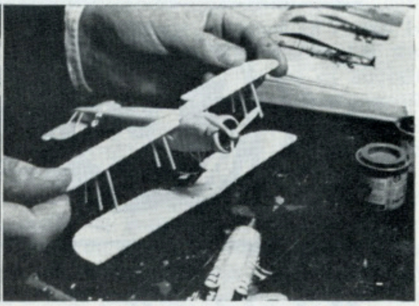
I have always found that one of the reasons why model makers fight shy of pre-war aircraft is the necessity of bracing wires between the main planes. There should, however, be no difficulty about this



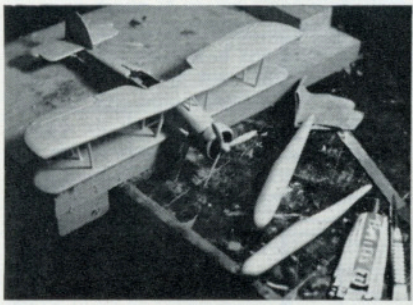
Cement together upper and lower wings and fuselage. Cement lower wing to fuselage and fill all gaps and location holes not wanted with Brummer Stopping. Paint inside fuselage light green before assembly.



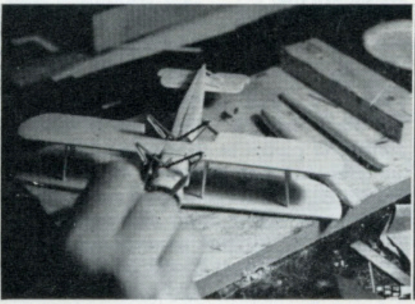
Paint engine and assemble propeller, attach to fuselage. Glue into position wing struts and leave for several hours to dry. Assemble tail unit. Cut two pieces of balsa 4½ in by ½ in for floats.



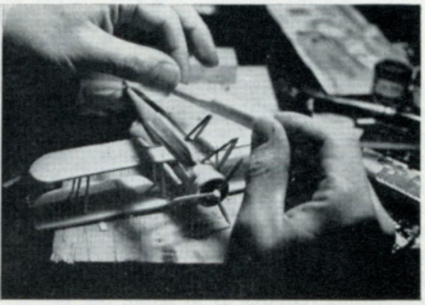
Sand down fuselage joints. Attach upper wings by applying small drops of cement to location holes on top plane and carefully lower fuselage and wing struts into position.



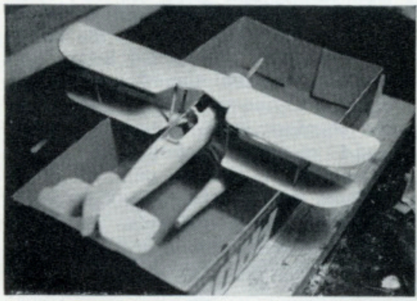
Cut and shape floats. Fill grain with mixture of clear dope and talcum powder, sand down until smooth. Apply second coat and sand. Cut struts for floats from Plastikard, cement in place.



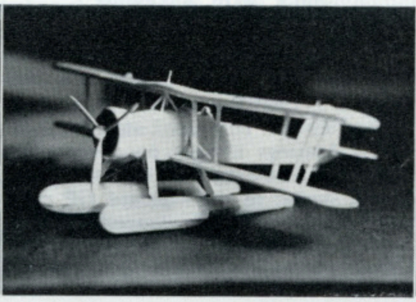
Complete strut assembly. Use tweezers to place small parts in position. Drill small holes in floats to locate struts. Give final sanding to floats.



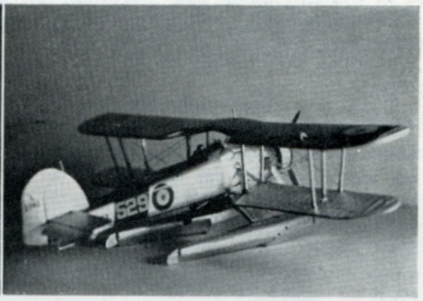
Attach floats. Note that each strut has locating stub cut in the base. Place glue on stub and not on float.



Leave model in box lid to ensure floats dry in correct position. Start assembly of wing bracing wires and keep the model in this position until complete.



Add cockpit windscreen, radio masts, tail mooring strut in place of tail wheel, aileron mass balances and pitot head on port outer strut. Add torpedo if wanted.

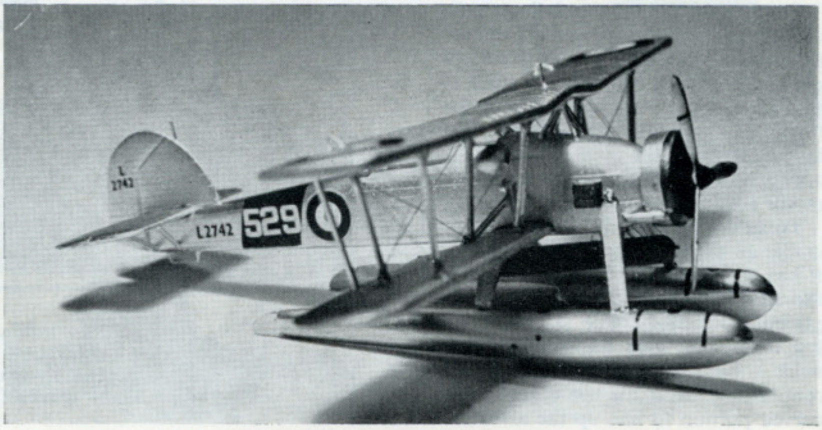


Final painting. The pictures above and below show the completed model. Two coats of silver paint can be applied depending on how the first dries. Add transfers as described.

if care is taken and sufficient time allowed for the job. I use Coates Terylene 'Gosamer' thread for this purpose, and find that the grey Y593 is the best. Only a small mark is left if you place a dab of glue on the inside strut and leave the end of the thread in it to dry thoroughly before repeating the operation on the next strut. Always be generous with the amount of thread you leave, and cover any marks with the glue by painting over them later.

The struts for the floats and other

Continued on page 192



Above, left: *The prototype Swordfish floatplane referred to in the text* (*photo by Charles E. Brown*).

Wheelspin

BY BERT LAMKIN

Motorising the Airfix 'E' type

FOR motorising the Airfix 'E' type Jaguar kit I decided to adopt the same method as with the Zodiac (described last month), using Airfix spares and Plastikard. This is based on the assumption that a lot of my readers are not fully-fledged mechanics, and have to rely on a corner of the kitchen table for a workshop. If you have managed to produce the workshop unit described in the July issue of AIRFIX MAGAZINE, then everything required is to hand. So, besides the kit itself, you need an Airfix motor, front axle assembly, rear axle and pick-up braids, and some small pieces of Plastikard—if you bought a sheet for the previous conversion, then you should have enough by you for this one.

There is a slight difference between the size of the Airfix Ferrari wheels and those in the Jaguar kit, but this need not worry us—our car is intended for racing. You will notice that with this 'E' type, the underside of the body is in three pieces, so that we will not have as much cutting away to do as with the Ford.

Mounting the motor

Starting with the central floor unit, cut off the angled front members and the extension piece on the sump. Now cut out the transmission tunnel and floor as shown in sketch A. As a guide to the fitting of the motor, the join between the upper and lower parts of the body is approximately the centre line of the motor armature.

To mount the motor, the same type of cradle as used for the Zodiac will do. It has the advantage that, by removing the 10 BA bolt, the motor can be replaced if necessary. The sketch in my last article will give the details. When made, the cradle can be cemented to the central unit, using the top edges of the curved portion to line up the armature spindle. (That piece of glass will help you again.) The seats, which will have to be trimmed, will provide some reinforcement. But let the cement on the cradle dry first.

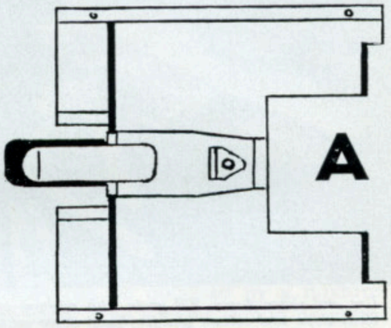
Front assembly

While waiting for the motor cradle to set hard, we can prepare the mounting for the front axle. Plastikard is again used, and pieces as shown in sketch B are prepared and cemented together as illustrated, not forgetting to insert the lugs on the Airfix front axle assembly before securing the second support. Some reinforcement in the angles, also indicated, is needed. This can be from scrap plastic. Place this on one side to set while the rear axle is tackled.

Back axle assembly

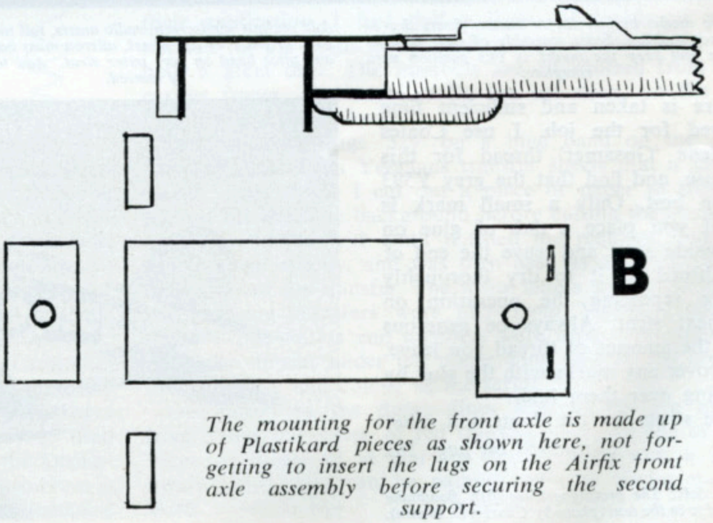
The third portion of the under body (part 25 in the kit) forms the base for our rear axle. Some cutting will be needed to clear the motor unit on the central section. This time I am using the nylon bearings already on the Airfix axle. The mounting will therefore have to be similar to the standard GP car body, ie two triangular-shaped sockets with a top retaining clip. These can be fabricated from Plastikard and made to fit in the angles of part No 25. The three pieces are shown in sketch C.

You will notice that the nylon bearings have a small circular flange incorporated. This will retain the bearing when mounted, being inside the side members, and registering with the recesses filed in the top, or rather bottom, piece. There is also an aperture in the latter piece to clear the crown wheel. Cement the two sides to part 25—the rectangular flange for the original axle will locate them the right distance apart, $\frac{7}{8}$ in in fact. Then drop the axle in place in the V-slots. Do not forget you are looking at the underside of the car, so the crown wheel will be to the right of the centre line. Now cement the retention plate, and put to one side to set. You can in the meantime deal with items 14, 15, 16, and 17 on the instruction sheet.

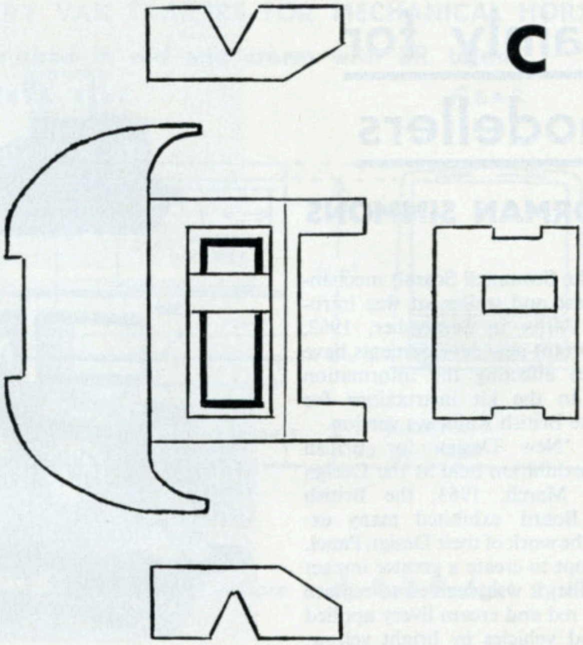


This sketch shows how the transmission tunnel and floor are cut, after removing the angled front members and the extension piece on the sump.

Now is the time to paint all those surfaces that will be difficult to reach when the car is complete. When the paint and cement are quite dry the three units comprising the chassis can be



The mounting for the front axle is made up of Plastikard pieces as shown here, not forgetting to insert the lugs on the Airfix front axle assembly before securing the second support.


C

Rear axle location is by two triangular-shaped sockets (as shown here) with a top retaining clip. These are made to fit in the angles of part No 25.

cemented together—sketch D shows how they should line up. The axles have been omitted for clarity.

The seats can now be cut to fit close to the motor unit. There will not be much seat left, but they reinforce the motor mounting. This is a case where one must sacrifice something for simplicity of construction. The motor could be mounted in the actual position indicated in the kit, but this would necessitate fitting a propeller shaft with bearings and a flexible coupling. So if you feel like the extra effort, the shaft can be mounted in the transmission tunnel on the central floor unit.

Modified mounting

Obviously, the cut-away portion will be different, and the mounting of the front axle assembly will need modifying. This arrangement leaves the seats intact, so the Airfix driver can be fitted fairly easily. With the rear-mounted version the driver will have to be somewhat drastically reduced—'cut down to size' in fact.

With the chassis in one unit we can now proceed with the upper part of the body. If this is going to be detachable, the bumpers and lights, etc, must only be cemented to one half of the body—either the bottom or the top—not both. In view of the shape of this car, we can copy the method used on the Airfix GP car—two small screws through the ends of the chassis to register with the plastic pillars on the top half.

Wider spacing

Drill centrally with a small drill about $\frac{1}{16}$ in through parts 35 and 25. (Incidentally, part 25 carries the twin exhaust pipes—you may need to space these wider to clear the screw head.) After drilling, place the two halves of the car together and mark inside the top half with the drill. This will give the position of the pillars. These can be cut from scrap plastic thick enough to take the screw. In fact, if you follow the standard car for sizes you can't go wrong. Wait for the cement to set before screwing the two halves together.

While writing about this particular feature, here is a tip to help you overcome the trouble when the thread has stripped in those pillars. Two small pieces of rubber insulation, stripped from electric light flex, inserted in the hole will do the trick. The holes will need drilling to take the thickness of the rubber.

Finally, before putting together and adding the finishing touches, two standard braids are threaded through the slots in the front axle's mounting and clipped on to the motor connections. Allow about half an inch below the car and bend the surplus to lie within the chassis.

Extra weight

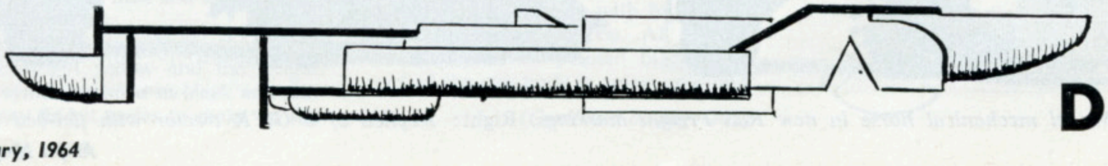
You may find some additional weight is required, especially if you've mounted the motor in the forward position. The article by Norman Simmons in our December issue will provide the answer.

There are one or two details that can be added to the completed car to give it that authentic look. 'Tape' the headlights with narrow strips of gummed paper—in prototype this is done on all cars carrying lights—which is criss-crossed across the 'glass' and prevents the pieces falling out in the event of breakage. Paint white discs on the sides and bonnet for the racing numbers. You can follow full-size practice here by cutting the actual numerals from plastic sheet, like Fablon, and applying it to the discs when the paint is dry. You will be easily able to change the number if required.

'Customising'

Another touch of individuality is given by adding a coloured stripe across the bonnet, or even running the whole length of the car. If the 'E' type is to race as an open car, a tonneau cover can be fitted over the passenger seat. Adhesive plastic sheet will do. Cut it to fit just over the cockpit edge. The prototype would be fitted with press studs (tiny spots of paint could indicate these) along the edge of the plastic. But they must be small and even—try your hand on a spare piece before tackling the actual cover.

The three units comprising the chassis are cemented together like this (the axles are omitted from the drawing for clarity).


D

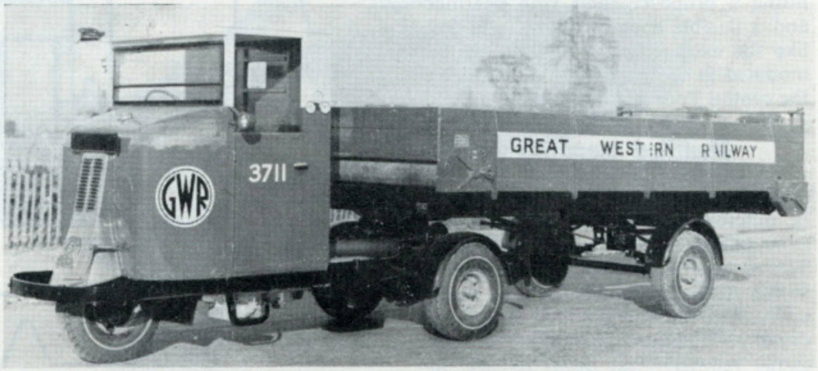
Mainly for modellers

BY NORMAN SIMMONS

SINCE the Scammell Scarab mechanical horse and trailer kit was introduced by Airfix in September, 1962, some important new developments have taken place affecting the information contained in the kit instructions for painting the British Railways version.

At the 'New Design for British Railways' exhibition held at the Design Centre in March, 1963, the British Railways Board exhibited many examples of the work of their Design Panel. In an attempt to create a greater impact on the public, it was decided to replace the former red and cream livery applied to BR road vehicles by bright yellow. In addition, the former BR totem is replaced by a new 'freight arrow' symbol.

The new bright yellow livery and freight arrow symbol is most striking on the three-ton collection and delivery van trailer, which can be built up easily from the flat-bed trailer in the Airfix kit. On these pages are reproduced 4 mm scale drawings of two types of three-ton van trailers. The simplest one to make is the flush-sided version with tapering sides. In my model the sides of the van were made from thin Plastikard cemented to the sides of the flat-bed trailer, and the roof was made of balsa wood. The scale dimensions of the flat-bed trailer are exactly the same as the van, namely 15 ft by 6 ft 6 in so, to preserve exact scale dimensions, it is necessary to reduce the size of the flat-bed trailer to allow for the thickness of Plastikard used.



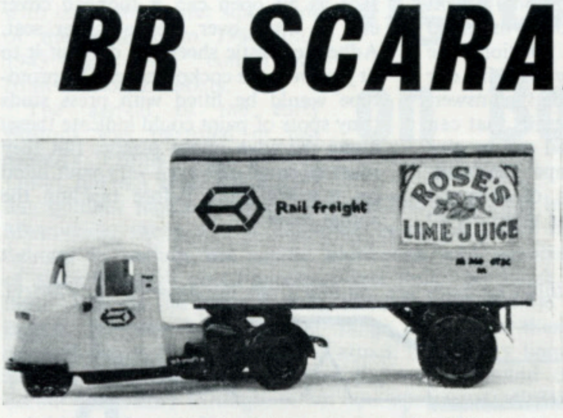
Top: *Modified mechanical horse model, to GWR specification, with a sheeted roof trailer.* Above: *A prototype GWR 3 ton tractor with a specialised type of trailer.*

I found it easier to start construction with the ends. These were cut to size and cemented in place. A second piece of card, cemented from behind each end with liquid cement, adds strength and holds the sides and roof firmly in place. The second pieces of card are cut straight at the top, 3 mm below the maximum roof level, to hold the balsa roof in position. Any thickness of sheet balsa can be used, as it can be sandpapered to size after assembly, using the ends as guides. The width of the strengthening pieces for the ends should be less the thickness of card used for the sides. Diagram A illustrates this.

Before the cement holding the ends in place has thoroughly set, the sides should be cemented in place and the van body can then be squared up all round and left to dry. On the flush-sided van there is a rubbing strip a scale 2½ in by 2 in on the front and sides at waist level. This can be cut from Plastikard of the appropriate thickness and cemented in place with liquid cement. A further strip of thin card a scale 7 in wide cemented in place around the lower sides and forward end completes the assembly.

The van chassis use larger-diameter road wheels than those supplied in the Airfix kit and a 12 mm wheel of suitable

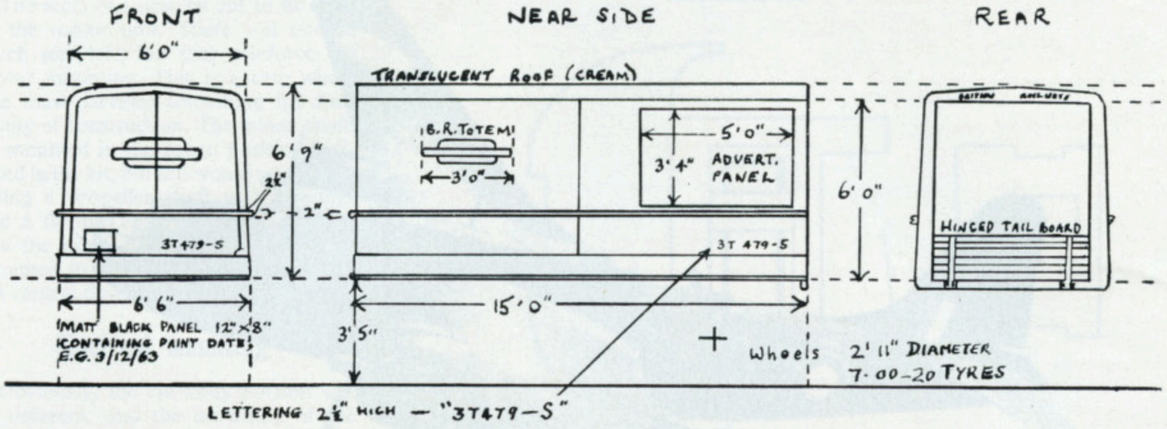
BR SCARABS PAST AND



Left: *Model mechanical horse in new Rail Freight markings.* Right: *Replica of a GWR tractor with flat-bed trailer.*

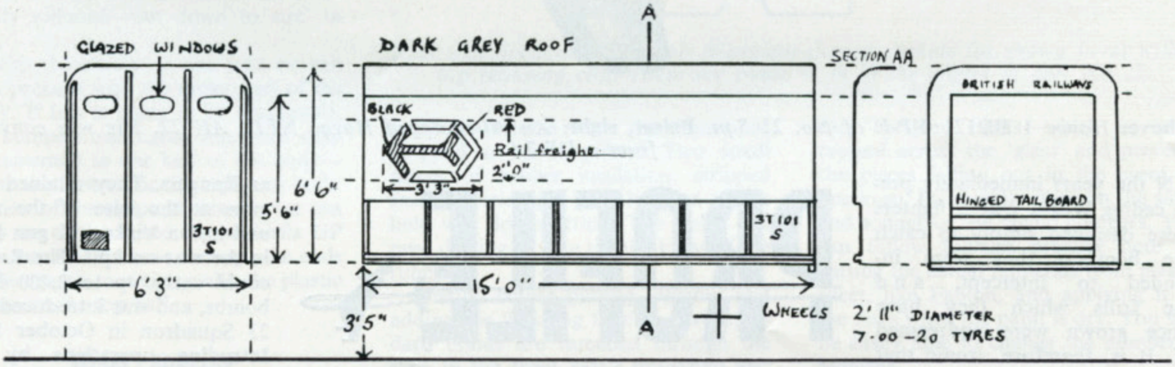
BRITISH RAILWAYS 3 TON DELIVERY VAN TRAILERS FOR MECHANICAL HORSE

Flush sided, tapered sides, finished in red and cream with BR totem



SCALE 4 mm = 1 ft

Straight sided, panelling below waistline, finished in yellow with Rail Freight symbol



shape should be substituted. This necessitates modifying parts 54 and 55 of the kit to raise the axle by .75 mm. I used a pair of 1:72 scale model aircraft wheels of approximately the right style and drilled out the centre with a $\frac{5}{16}$ in drill to take the standard hub caps (parts no 57 and 59). New mudguards are required, and can be cut from Plastikard. It is preferable to make these from two or more thicknesses of card which, when cemented together, hold their shape and can be filed and sandpapered to correct outline.

PRESENT

The finished van body should be painted bright yellow and the freight arrow symbol painted in black and red. You may find it easier to make up the symbol from thin strips of coloured Sellotape. Except for the colour scheme, the Scarab tractor is unchanged. A small freight arrow symbol should be painted on the cab doors. Lettering is in black and can be done with Indian ink and a fine mapping pen. All chassis details should be painted black. The roof of the van body is cream-coloured

(*Continued on page 202*)

Diagram A (*NOT TO SCALE*)

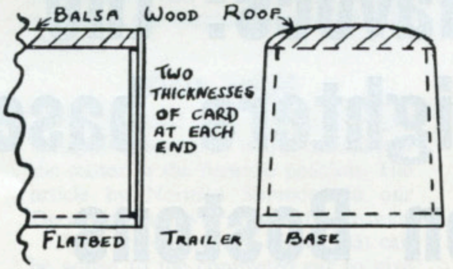
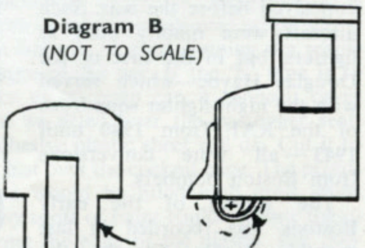
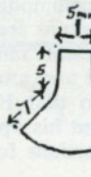


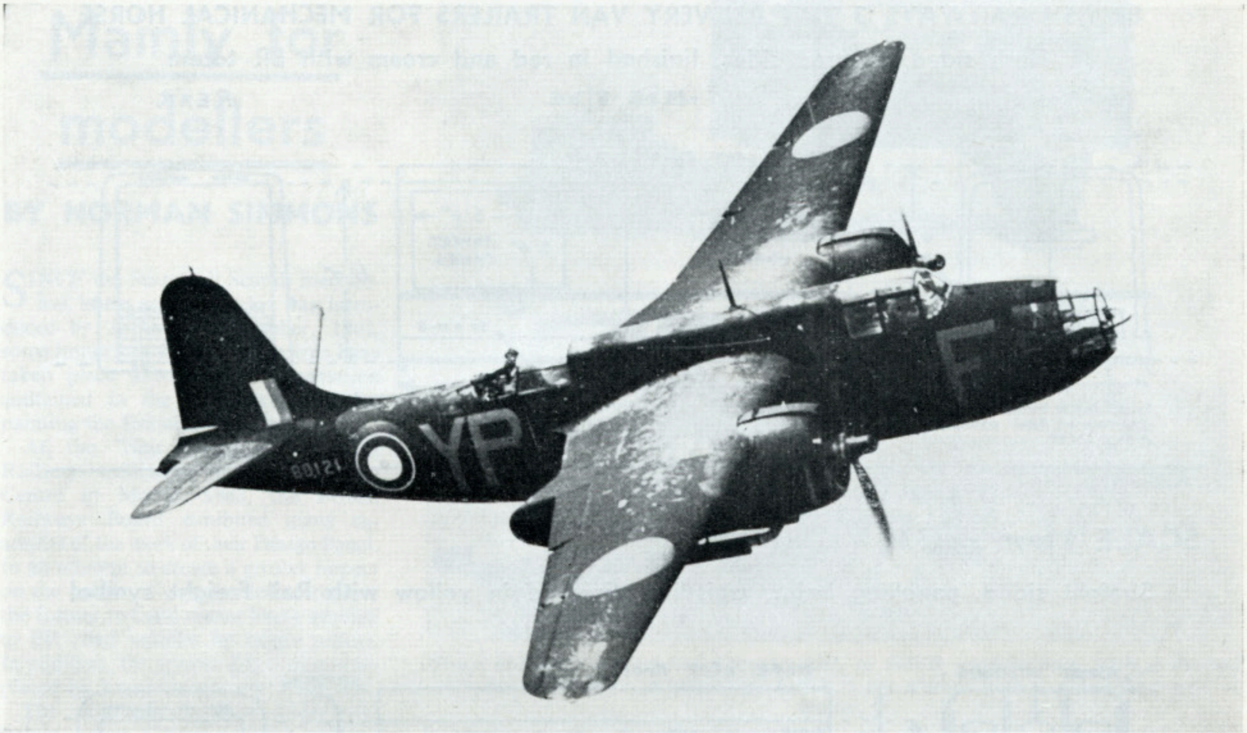
Diagram B
(*NOT TO SCALE*)



Projections curved over and cemented on rear spigot to hold wheel in place.

Diagram C





Above: *Havoc 1 BD121:YP-F of No. 23 Sqn.* **Below, right:** *An AI-equipped Havoc NFII, AH522. She was converted from a DB-7A.*

PROFILE

Havocs: the fighters based on Bostons

IN the years immediately preceding World War 2, fighters were designed simply to catch the bombers they were intended to intercept, and the frills which they have since grown were undreamed of. It is, therefore, ironic that two of the most successful fighters, the Mosquito and Ju 88, were derived from bombers conceived before the war. Such aircraft were mainly built as fighters, but in the case of the Douglas Havoc—which served with the night-fighter squadrons of the RAF from 1940 until 1943 — all were conversions from Boston bombers.

The arrival of the early Bostons was recorded in last month's Profile. Clearly, the DB-7s did not meet the RAF's day bomber requirement and the DB-7As were little better. Meanwhile, there was a desperate need for faster night-fighters to replace the ageing Blenheims, and particularly of aircraft which could accommodate bulky AI radar. For these purposes the early Bostons seemed quite suitable. The Boston IIs also had sufficient range to permit them to maraud across the Channel and attack the enemy bombers at their bases by night, so that Fighter Command could harass the enemy throughout his operations.

Initially, Boston II conversions for this role were known as Rangers. They retained four guns at the base of the nose, and had a Vickers K gun fitted in the rear cockpit. The Ranger could carry up to 2,400 lb of bombs, and was introduced into 23 Squadron in October 1940. Intruding operations by the squadron's Blenheims commenced soon after, and later the Havocs (Rangers re-named) joined them. AE461 was one of the first to reach 23 Sqn, but after a few weeks she went to 418 Sqn. BD112 coded YP:T came into use in the Spring of 1941, and carried very pale grey codes and serials. BD121 was another, coded YP-F in red. The former had typical 1941-style wide yellow and white rings in her roundels and flashes, whereas the latter had the outer ring of her fuselage roundels reduced in width.

It is, perhaps, unfortunate that the name Ranger was not kept for these clear-nosed Boston-like aircraft; it existed for but a short time and was superseded by Havoc. This name applied both to the Boston IIs used as intruders by Fighter Command and also to a night-fighter version with a solid nose. The first of the latter, BJ464, reached the RAF at the end of 1940 and, like the Rangers, was black overall. Eight .303 in guns were installed in the nose, four in addition to the others carried by the intruders. To distinguish the latter, they were designated Havoc 1 (Intruder).

AW403 of 85 Sqn, was one of the fighters, with VY-V applied in the usual Boston/Havoc positioning, in a rather light shade of grey. BB900 with a solid nose was YP-G and others, likewise painted a very matt black and wearing light grey codes and serials, were BJ469:VY-C and BJ472:VY-R. The soot black paintwork on the night-fighters rapidly deteriorated in the difficult conditions in which they operated, so if you convert the Airfix Boston into one of the Havocs a liberal supply of Humbrol flattening agent is essential when painting time comes around.

To convert the Boston into a Havoc 1 will require more skill than at first might be surmised. The engine cowling shape is similar to that of the Boston II depicted in our previous issue, and is not by any means straightforward to produce. A new fin and rudder will be required. If the version made is of the clear nose type, then a stepped rear to the canopy will need to be built, which calls for careful cutting and placing of transparent areas. The bulges over the side guns on the nose will have to be dispensed with, but before removing them it will be found best to reduce the length of the two prongs into which the nosewheel struts fit. Otherwise, it will be difficult to retain the retracting nosewheel. Some very careful fairing of the holes which will appear when the side blisters are removed will also be called for.

A compensation is born by the conversion, for it is very easy to weight the new solid nose, which on the model will need to be in keeping with the 47 foot length of the fuselage of the real aircraft. Many fighter Havocs had AI Mk VI installed, which called for bow and arrow aerials on the nose and two V-shaped aerials fitted through the port wing at about two-thirds of its span. An H-shaped aerial was fitted on the port side of the nose. Discarded gun barrels are useful for making these small features, which will be found to add much realism to the models.

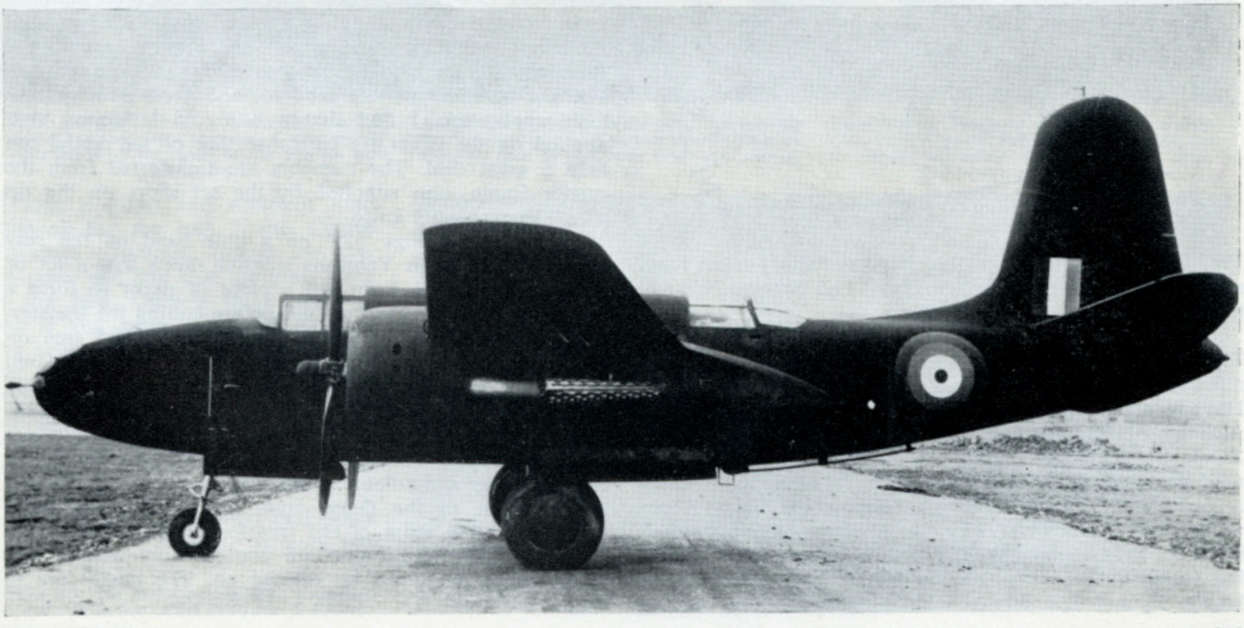
An interesting oddity for a model collection would be one of the Havoc I (Pandora) aircraft. These resembled the solid nosed fighters, but carried in their bomb bays the Long Aerial Mine, or LAM, experiments with which were undertaken under the code name 'Mutton'. A score of Havoc Is were supplied to No 420 Flt at Middle Wallop for the purpose, where they joined a motley collection of aircraft which included a few Harrows. Mutton consisted of a small bomb suspended from a parachute by 2,000 feet of piano wire—to scale with the Airfix Havoc this would require about 12 feet of invisible thread.

420 Flight became operational during October 1940, and set about dropping the mines ahead of enemy night raiders. Any of these colliding with the wire would have quickly caused the parachute and then the bomb to hit the enemy bomber. The sky is a large place and the chances of success were slender, so the scheme was abandoned, and the unit—which had become 93 Squadron on December 7, 1940—was disbanded almost a year later. Havoc I (Pandora) known for a short time as Havoc III, and used by the squadron, included AX914:HN-L and AX913:HN-D, both all black and carrying grey codes, etc.

Nearly all of the DB-7As supplied to Britain were converted into night fighters or intruders. The former had a solid nose designed by Martin-Baker Aircraft, in which there were no less than 12 x .303 in guns, and this was rapidly fitted to almost 100 aircraft. The Havoc IIs had fin shapes like those of the Boston III and similar engine cowlings, so the kit conversion requirements for this mark are easier. It is still necessary to reduce the size of the nosewheel attachment prongs and to remove the bulges on the sides of the nose. Most of the Havoc IIs carried AI gear with the radar screen hooded in the rear cockpit, and this can easily be represented on the model.

The operator sat at the rear of the cockpit, from which the gun mounting was removed, and faced forward as in such Havoc Is similarly equipped. Bow and arrow aerials need to be fitted as before, likewise long-tailed flame damper exhausts. For the latter I took two stacks from a Beaufighter kit, from which a year ago I had converted a Beaufighter into a Mk II. This is but one instance of just

Continued on next page



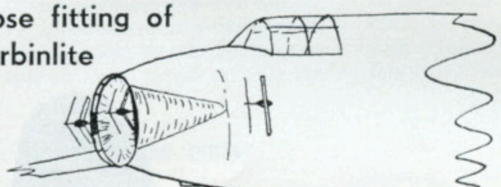
PROFILE—*Continued*

how valuable discarded pieces of any kits can become.

Comparatively few squadrons operated Havocs as night-fighters, and there were frequently to be seen among them a few clear nosed aircraft, the canopy stepped in all but the instances of DB-7Bs, or what might best be called Boston III Intruders. No 85 Squadron was first to operate the Havoc, from Debden, where Mk Is joined the unit in January 1941. AX403:VY-V was one such. Shortly after, the unit moved to Hunsdon and used Havocs such as Mk II AH500:VY-A until it received Mosquitos. No 23 Squadron, which pioneered the use of Havocs, gave up its mixture in 1942.

A fairly simple conversion for Havoc I or II is presented by modelling one of the Turbinlite-equipped machines. These aircraft had their noses cut off almost immediately ahead of the undercarriage bay, and a flat circular panel fitted on to the fuselage cross-section. Into this was installed a searchlight giving some 2,700 million candlepower. Design of the light had been done by Air Commodore Helmore, and production undertaken by GEC. To retain the circular panel and light against the rectangular-shaped fuselage cross-section, two special fairings were placed on the side of the nose. The wing aerials were retained on these aircraft, and AI aerials were also placed at the front of both the retaining fairings. Batteries for the searchlight were installed in the bomb bay and the aircraft were unarmed.

It was planned that the Havocs would patrol alongside the satellite armed fighter, then illuminate any target for the fighter to destroy. Ten Flights were formed to operate the Turbinite Havocs, both Mk I and II, and eight of these being the equivalent to four squadrons were operational by the end of 1941 in three Fighter Groups. The performance of the scheme and equipment during exercises was good, but there were few large-scale raids to intercept in 1942. In poor weather the equipment was obviously of little use, and co-operation with the armed fighters on dark nights proved none too easy. Added to this, the performance of enemy bombers was improving fast, and the blunt-nosed Havocs were hard put to catch the enemy. It was February 1943 before the Turbinlite Havocs were mainly taken from service, by which time the ten flights had become Nos 530 to 539 Sqns.



Nose fitting of Turbinlite

A surprisingly large number of Havocs were fitted with Turbinlites, certainly more than the generally-quoted small numbers. The special Turbinlite flights also used fighter Havocs, and some aircraft specially fitted out as trainers, such as BD116. A trials Turbinlite Havoc was AW400: ZQ-A, which had red codes. BD115 was a Mk I (Turbinlite) used by 532 Sqn. W8389 was a Boston III converted to carry a Turbinlite in Havoc style and the red codes UB-X. There were many such conversions, like W8300 and W8303 used by 1452 Flight. Boston III W8352 passed through the Turbinlite stage to become a solid nosed machine resembling a Havoc II, and saw service with the Royal Navy wearing yellow codes AR-9Q flanking the fuselage roundels. This, and some Havoc Is and IIs still in night-fighter black, were used as target towers by the Navy.

Many Havocs and early Bostons survived comparatively uneventful periods of front-line service, and found all manner of special niches of employment. AW394, a Havoc I, went to the USAAF in 1943, also AX913 which had carried Mutton and undergone Turbinlite conversion. AH484:A was still to be seen at Farnborough for many months after the war, 'Beau Geste' scribbled on her nose, where she was used for fire tests.

AE469, one of the very earliest Bostons, survived long enough as a Havoc to wear D-Day stripes. She, like a few of the Bostons which had seen late service with Fighter Command, was then painted in the grey and green finish associated with the Beaufighter and Mosquito.

M. J. F. Bowyer

Seaborne Swordfish—*Continued*

small parts were made in this instance from Plastikard. Five thicknesses are available. I used .060 in thickness which costs 5s for a 13 x 9 in sheet.

PAINTING

Painting this model is an easy job. The whole thing is given one or two coats of silver, apart from the propeller boss, which is in blue, and the torpedo, which should be in dark grey. The forepart of the engine cowling should be coloured bronze, which can be obtained by a mixture of Humbrol copper and black. The cockpit should be given a coat of light green and the pilot's headrest a touch of black.

MARKINGS

The upper and lower wing and the fuselage roundels were taken from one of the HisAirDec transfer sheets marketed by BMW Models and imported from the United States. Serial numbers (L2742) on the rudder and rear fuselage came from Letraset transfer sheets—10 and 12 point Gill Bold Condensed. These sheets can often be obtained from artists' supply shops—you need the 'wet' type, not the new 'Instant' Letraset which just cannot be used for these small jobs. The letters themselves have no 'carrier' like the transfers we are used to, and need great care in their application. I find that a little old fashioned 'spit' applied on the finger tip to the surface of the model can help a great deal. The numbers are transferred from the carrier frame, also supplied by the art shop, on the tip of a sharp-pointed knife.

Squadron markings '529' on a blue band on the rear fuselage came from Yeomans transfer sheets that a lot of model shops stock. I cut out a piece of paper to form a pattern for the blue background before cutting the transfer. This was fiddled with until it fitted the required area on the fuselage exactly, and was then used as a former from which to cut the transfer. The white letters are $\frac{1}{4}$-inch high.

Underwing transfers were also from Yeomans sheets. Black $\frac{1}{8}$-inch letters and numbers were used. The numbers '529' also appear under the upper wing surface and are in the same size and colour as the serial.

Decoration to the floats—lines and circles—are made from either thin strips of red transfer cut from one of the Yeomans sheets or, if you are one of those with a very steady hand, they can be painted on. The circles are in black.

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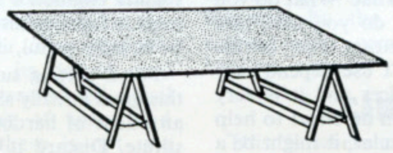

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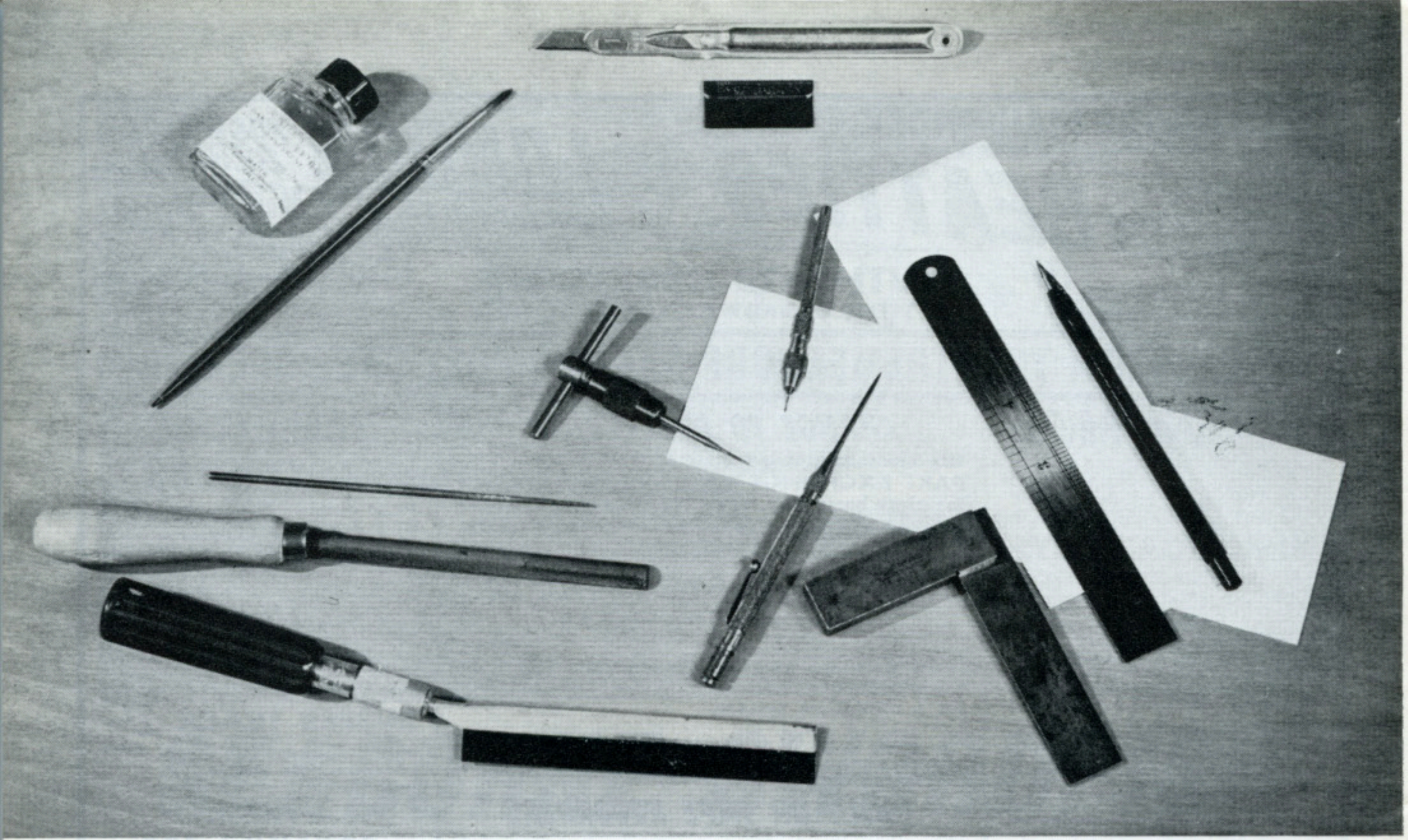


MODELLING TOOLS FOR BEGINNERS

Plastic Modelling

by Mike Bryant

A GREAT many of the questions I am asked concern the tools you need in modelling, and phrases like 'What do you use to do . . .?', and 'What kind of pliers do you use?' are continually cropping up both in conversation and letters. Well, you know, the tools you use or don't use depend very largely on personal preferences and prejudices and it is very difficult to be dogmatic on the subject. But in an effort to help modellers in general, and beginners in particular, it might be a good thing to run through some of the tools I consider essential, and to give some ideas on what *I* think are desirable additions to a basic tool kit. For this article I am not restricting my remarks to *plastic* modelling only, but am widening the scope to include modelling in card and wood.

CUTTING TOOLS

First, then, the means of cutting out: a sharp modelling knife, a steel ruler, a metal square and something *on* which to cut. There are a number of quite inexpensive knives on the market, all with interchangeable blades, and one kind in particular, by Trix, with a whole range of different gouges, routers, saws and chisels, all of which fit the one type of handle. I always like a six-inch steel rule for general small-scale modelling, but if you do not want to buy this *and* a steel one-foot rule as well, it would probably be best just to get the longer one. The smaller engineer's steel squares are very handy; the one I use most is four inches long, but a larger carpenter's square would be equally useful, if not quite so handy.

For a cutting surface, the ideal is a piece of plate glass, as this gives a really sharp, clean cut, but if you cannot rise to this an offcut of hardboard, used smooth side up, is a good substitute. Discard it and get another piece as soon as the face becomes badly-scarred—you cannot cut cleanly on such a surface. Plate glass does, of course, treat cutting blades pretty harshly, and a small oilstone on which you can sharpen your knife is a real money-saver—no-one can produce good models with a blunt blade.

Additional cutting tools which are more or less essential are saws. I have already mentioned the fine tenon saw blades sold by Trix, which are excellent for straight cutting in both metal and softer materials, such as wood and plastic, as are the smaller Eclipse hacksaws. For outline cutting, a fretsaw or its smaller brother, a jeweller's piercing saw, (which cuts metal) is very useful. But a great many jobs can be tackled using the Trix blades mounted in their knife handle.

Of course, for 'cutting' plastic sheet one of the best ways is the 'score and crack' method. For this, as well as for marking out on metal, a scriber is useful; you can use an old compass point or an old style metal gramophone needle held in a pin chuck (which I shall mention later). Once again the oilstone comes in handy for keeping the points sharp.

FILES

A smooth, flat metal file is very useful, particularly if you are assembling white metal kits. Jeweller's fine files (round taper, flat and half-round in particular) are things to acquire in due course, but be sure you get the better quality ones. Sandpaper and glasspaper in various grades, or a supply of manicure boards, are useful in wood modelling.

DRILLS

For holes, a drill and drills are needed, though often in the small sizes we deal with in model-making a pin vice is perhaps of more use. These are miniature precision chucks mounted on a milled stem; Eclipse sell several sizes and I find the smallest about the most useful. In wood and plastic there is often no need to mount the pin vice in a drill chuck, and the hole can be made by mounting the drill in the pin vice which is rotated by twisting between the thumb and forefinger.

PLIERS

The subject of pliers is a difficult one on which to give advice. I think every modeller has his own pet ideas about the most useful types—I certainly have a favourite pair of fine-nosed ones which I find will do for almost any kind of job. Certainly to start with a good quality pair with long, thin jaws and a firm grip on even the thinnest materials will be about the most useful, but if you are anything like me you will gradually acquire an assortment of sizes and types. Fine, round-nose, side- or end-cutters all have their uses at various times.

For this type of modelling, you will find that you need the jeweller's or instrument maker's lighter types; there is a good and quite inexpensive range of them coming in from Germany. The heavier types of pliers to be found in multiple stores are not much use in the general run of modelling although, if you do have any heavy bending or cutting to do, *don't* use your lightest modelling pliers—you will only strain them and will soon find they are useless for the finer work for which they are intended. And if you really cannot get hold of any pliers at all, it is amazing what you can do with a pair of tweezers!

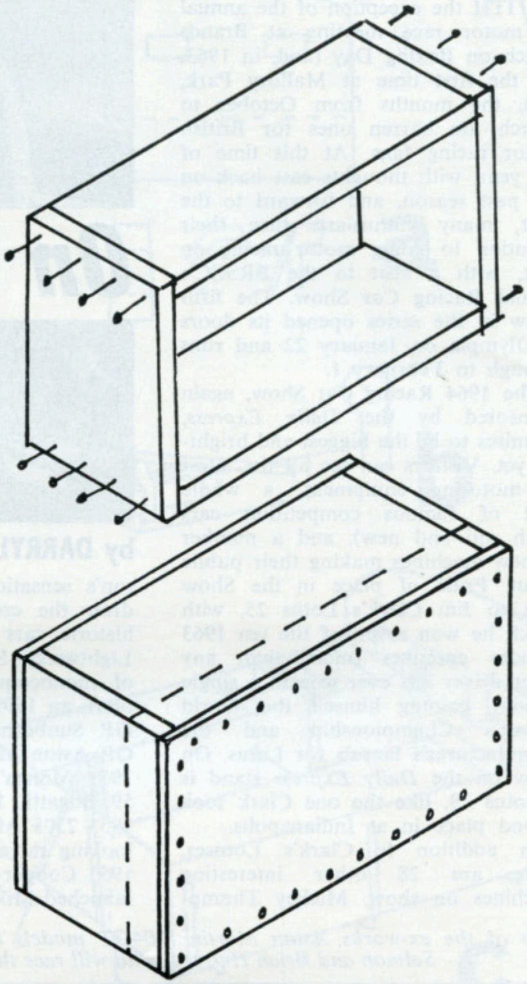
LATER ADDITIONS

Lately two developments have revolutionised the home miniature 'workshop', and I have mentioned them both at some length in previous articles—the battery-operated miniature power tool and the self-contained spray gun. I would certainly put high on my list of additional tools to acquire one of the more powerful Minidrills (together with some extra grinding and cutting heads, and a miniature circular saw) and Humbrol's excellent spray gun. Both these useful aids to good modelling have the immense advantage of being independent of mains electricity and completely portable.

There are other tools which you will doubtless get as you progress with your modelling. But you will see from what I have written that the initial outlay need not be very great, particularly if you leave the power drill and the spray gun until later.

TOOL BOXES

It is, of course, a good idea to have a box where all your modelling tools can be kept ready for use. In the early stages, about the cheapest container you can get is an ordinary box file which you can buy at any office supply shop. But sooner or later, your tool kit will outgrow such a modest container, and you will be faced with the need to buy or make a box big enough for everything.



Above, left: *A selection of items in a beginner's tool kit. Top drawing (above) shows side and ends of simple tool box glued and pinned together, while the bottom drawing illustrates the top and bottom glued and pinned in place (the dotted line shows saw-cut to separate lid from bottom of box).*

Obviously the carpenters among you need no hints from me on how to do this. But if, like me, you never quite know when the lid you make is going to be a really good fit on the box itself, perhaps I *can* give you one worthwhile tip, for which I claim no originality as it is, I believe, a very old dodge. Instead of making the bottom of the box and its lid separately, make the lid and the box as one—that is, glue and nail or screw the sides and the ends together, glue and pin on the top and the bottom and then separate the lid and the box bottom by carefully sawing round a marked line. Add catches, hinges and carrying handles and you should find that you have a strong tool box with a close-fitting lid. Racks, clips or straps can be screwed to battens 'Evo-stuck' to the bottom and to the lid, and I strongly recommend a compartment for some tins or jars to hold various small parts.

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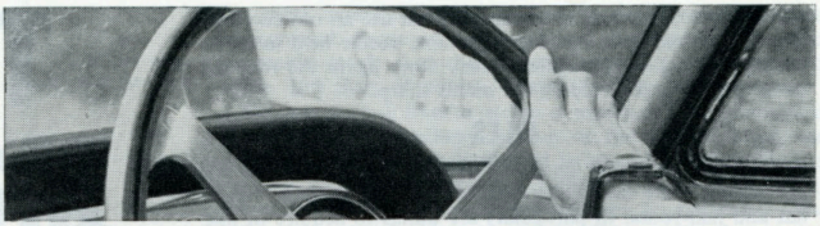
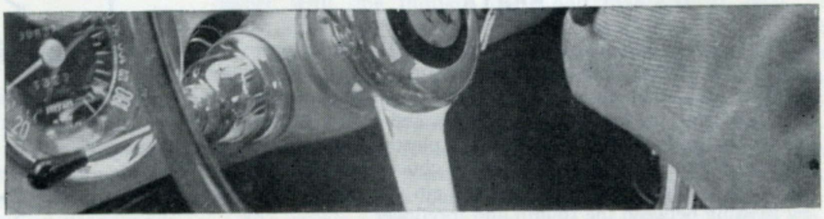


On road and track



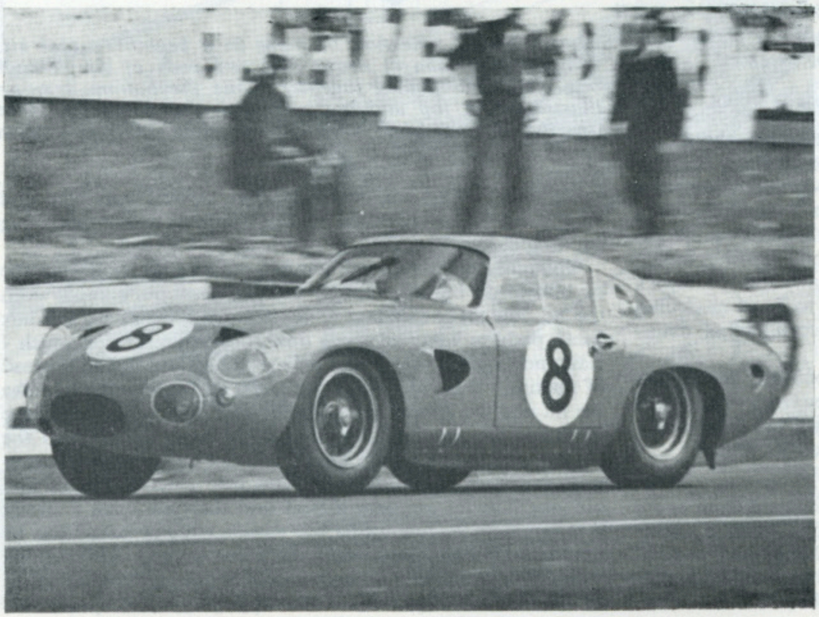
by DARRYL REACH

WITH the exception of the annual motor race meeting at Brands Hatch on Boxing Day (and, in 1963, for the first time at Mallory Park, too), the months from October to March are barren ones for British motor racing fans. At this time of the year, with thoughts cast back on the past season, and forward to the next, many enthusiasts turn their attention to going motor racing on foot, with a visit to the BRSCC's annual Racing Car Show. The fifth Show in the series opened its doors at Olympia on January 22 and runs through to February 1.

The 1964 Racing Car Show, again sponsored by the *Daily Express*, promises to be the biggest and brightest yet. Visitors can see all the latest fast-motoring equipment, a whole host of famous competition cars (both old and new), and a number of new machines making their public debut. Pride of place in the Show goes to Jim Clark's Lotus 25, with which he won seven of the ten 1963 grandes epreuves (more than any other driver has ever won in a single season), gaining himself the World Driver's Championship and the Manufacturer's laurels for Lotus. On show on the *Daily Express* stand is a Lotus 29, like the one Clark took second place in at Indianapolis.

In addition to Clark's Lotuses, there are 28 other interesting machines on show. Mickey Thompson's sensational dragster is sure to draw the crowds, while among the historic cars on show are the 1939 Lightweight Special (an early example of monocoque racing car construction), an 1899 Canstatt-Daimler, 1922 GP Sunbeam, 1923 Mercedes, 1925 GP Aston Martin, 1926 G6 Amilcar, 1931 'Monza' Alfa Romeo, 1934 Type 59 Bugatti, 1934 K3 MG Magnette, 1953 250F Maserati (one of the best-looking racing cars ever built) and a 1953 Cooper-Bristol of a type which launched Mike Hawthorn into prominence on a motor racing career which eventually led to his World Championship win in 1958.

Two of the ex-works Aston Martin DB4GT models have been sold to Mike Salmon and Brian Hetreed, who will race them in 1964.



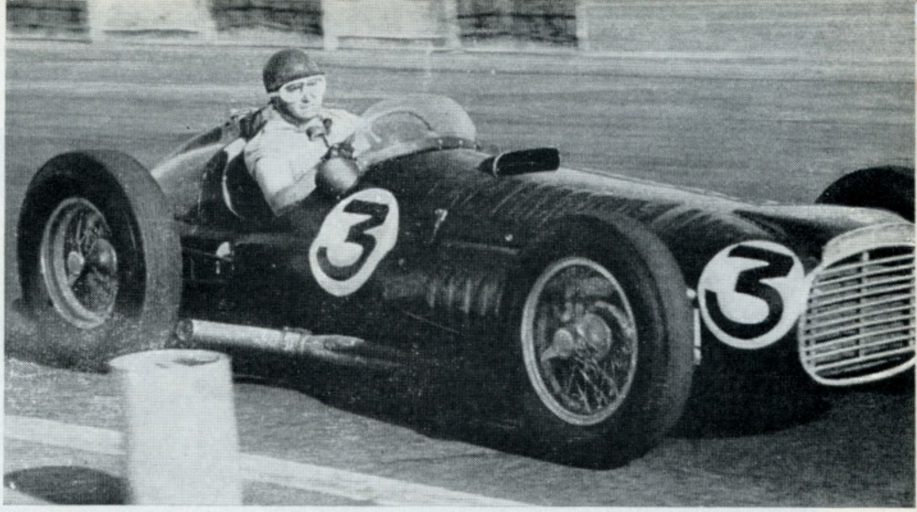
A special section at the Show is devoted to Cars of the Champions, 1963, and includes the Ford Cortina with which Jack Sears took the Saloon Car Championship, Josh Randles' Cooper-Maserati (winner of the *sportscar* hill-climb championship), the Felday-Daimler with which Peter Westbury won the RAC Hill-Climb Championship, and the Ron Harris-Team Lotus 27 that Peter Arundell placed first in the *Express and Star* Formula Junior Championship.

Finally, there is a fine trio of Grand Touring cars, comprising a Type 212 Aston Martin, a GTO Ferrari and a lightweight 'E' type Jaguar.

On the trade exhibitors' stands can be found anything from the latest in gearboxes or carburettors to steering wheels and lamps. Besides this sort of equipment, there are also several new motor cars. Coopers are exhibiting their Formula 3 car, while Lotus have on show their stupendously powerful Ford V8-engined Lotus 30 sports car. Well-known racing and rally driver Sydney Allard, builder and driver of the Chrysler-powered Allard Dragster, has designed a new dragster, known as the Dragstar Dragon, to be sold in kit form. The sport of drag racing (already well-established in the USA) is spreading fast in Britain, and this year the Allard Owners' Club is organising the First British International Drag Festival, which will bring together top drag stars from England and abroad to compete in a series of drag meetings this September.

More newcomers on show include the new Sebring Elva Courier, the latest Merlyn sports car and their new Formula 3 machine, the Elva-Porsche sports car, the Emery GT car (powered by the Hillman Imp engine) and the new GT/sports-racing car built for the newly-formed Sprinzel-LawrenceTune racing team.

On the Auto-Models stand (no 31) can be seen the new Auto-Kits model of the 'stack pipe' BRM. In metal kit form, this 1:24 scale replica costs 49s 6d. Miniature car racing fans will also want to visit stand 69, where the Electric Car Racing Association has some interesting exhibits.



Fangio in a V16 1½ litre supercharged BRM. Basically, this ill-fated machine would be eligible under the newly-announced 1966 Formula 1 racing regulations.

GT topics

ONE of the stars of last year's Racing Car Show was the newly-announced Lola GT. Since then, the car has undergone a lot of development work (including an encouraging appearance in the Le Mans 24-hour race). Designer Eric Broadley, of Lola Cars, has now the full backing of the giant American Ford combine and a full competition season is planned with the new Ford GT, which will be a formidable challenger to the hitherto-invincible Ferraris.

Although Aston Martin will not be running a works team of GT cars in 1964, two of the Monza Coppa Inter-Europa winning DB4GT models have been sold to Mike Salmon and Brian Hetreed, who plan a full racing programme with the cars in 1964.

Another Monte

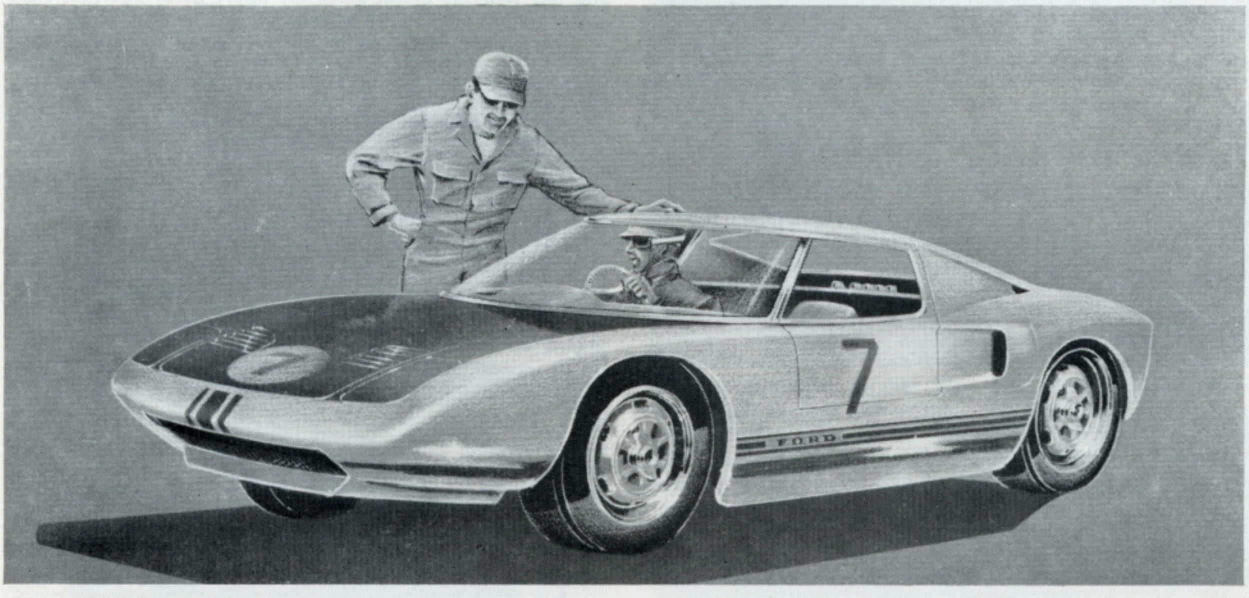
BY the time these notes appear, another Monte Carlo Rally will be under way, with some 300 crews battling against the European elements on their way from the nine different starting points, to the Principality. For the first time, there is a starting point in Russia (at Minsk), chosen by nine British teams and five Russian cars.

Among the notable British drivers taking part are Pat Moss (in her first drive for the works Saab team) who is starting from Oslo. Her husband, Erik Carlsson (winner of last year's Monte) is also entered. Graham Hill is partnered by Ian Walker in one of the three American-entered works Ford Falcon Sprints, starting from Paris.

New Formula 1

FROM January 1, 1966, the Formula 1 Grand Prix engine regulations will permit cars to use power units of 1½ litres supercharged or 3 litres unsupercharged. This may seem a strange move, as the current 1½ litre formula was meant to produce less powerful, and therefore safer, cars. This apart, at least the 1966 regulations will mean some pretty 'hairy' motor cars, in true pre-war GP style.

The Lola-inspired Ford GT—a formidable new challenger to the Ferrari for the forthcoming racing season—is powered by a 4.2 litre V8 engine mounted ahead of the rear axle.



New kits and models

IRON CURTAIN PLASTICS

ALTHOUGH we all complain from time to time about inaccuracies in the aircraft construction kits available on the home market we are really very well off. This fact was brought home to us recently when two kits from the Soviet Union arrived at the office, kindly sent in to us by reader Ing K. Kliment of Prague.

The two models, one of a TU-104 and the other of a fighter aircraft of no known design, were extremely crude when compared to the kits available in the UK. Although in different colours, the plastic from which they were moulded was similar to pre-war Bakelite and very brittle. A bottle of cement was included in each kit, but I found that this did not effectively stick the sections together unless a great amount was applied, consequently leaving a very untidy join.

Transfers, none of which was representative of the airline colours in the case of the TU-104, were different to those which we know. The sticky side was uppermost on the backing paper and, although they were easy to get off in hot water, the quality of the gum left much to be desired. The fighter aircraft looked something like the Mig-19 which Aurora marketed some years ago, and had a nose radome and twin jet orifices under a tall fin and rudder. The canopy was semi-opaque and cockpit struts very heavy.

Unfortunately, we don't know the price that these kits sell for in Russia, so no comparison can be made, but I should imagine that the prices are fairly high. Apart from my criticism of the two kits, it is pleasant to see that other countries apart from the USA, Great Britain, France and Japan are beginning to produce plastic aircraft kits. The standards set by the West are high and it is hoped that others will attempt to match these in later productions. *A.W.H.*

NARROW GAUGE ROUND-UP

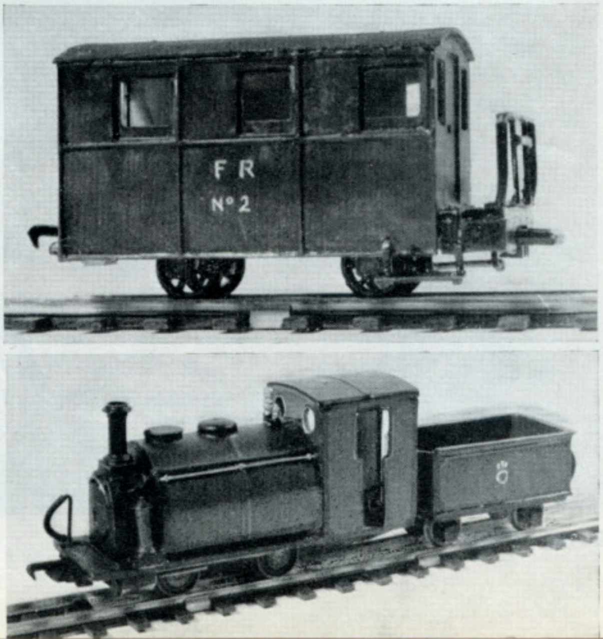
GEORGE MELLOR, in collaboration with the Festiniog Railway Company, has launched a series of kits for a loco and rolling stock of this grand little line to a scale of 5½ mm to the foot, running on 12 mm gauge track. We understand their reception has been enthusiastic and, from the samples submitted to us for review, we can well understand why this is, as all are superb models.

All the rolling stock kits so far issued are in white metal with plastic wheels, and only require cementing together and painting to produce accurate, well detailed and sturdy models. The amount of 'flash' on the kits submitted was very small and was easily removed with a knife or a file, while the parts went together accurately without any adjustment. We used UHU as adhesive, but Durofix or any of the impact adhesives would have done, provided that 'thin' joints can be made. The only step in the assembly which we found required care was the fitting of the coupling hooks. We found it best to 'ease' the channel bearing with a file so that the hooks rose and fell without sticking.

The vehicles are fairly heavy, and it is particularly important that they should run freely if any length of train is contemplated. The pointed ends of the axles must be cut off with a sharp modelling knife so that the axles run in the cast U-shaped slots and do not protrude *at all* on the outside face of the underframe. The cast retaining axleboxes then only stop the wheels falling out when the vehicle is lifted off the track and great care should be taken in gluing them in position to ensure that no glue gets near the axle ends.

The goods vehicles submitted were an open wagon, a slate wagon and a bolster wagon. All sell at 5s 10d each, complete with wheels and couplings and come in neat Cellophane packs. No assembly instructions are included, but their make-up is so obvious and straight-forward that this is one of the few occasions when we agree with the makers that the additional cost involved in including them is not justified.

The coaching stock we received consisted of a first class coach, a quarryman's coach and a brake van which is, of course, used for both passenger and goods duties. The last two have underframes very similar to the goods vehicles and our remarks about assembly apply here. The first class coach differs in that the wheels are retained by two lengths of wire which are glued along the bottom of the channel



Two of the Festiniog narrow gauge items from George Mellor reviewed this month—the quarryman's coach and the 'Prince' loco and tender.

underframe. We think a note on the package label about these two lengths of wire and about the position of the steps in both the quarryman's and the brake coach would have been a good idea; some beginners could well be foxed on both these points.

The amount of 'flash' was again commendably small and the parts went together well. The greater size of the passenger stock means that these all-metal vehicles are pretty heavy, which is good for track holding but it will need a powerful loco to pull anything but a modest train up gradients or round tight, typical curves. Those who hanker after longer trains might well consider substituting card roofs for the metal ones supplied as this step would result in a big lightening of the load for a loco. Prices for all the passenger stock, including the brake van, are 9s each.

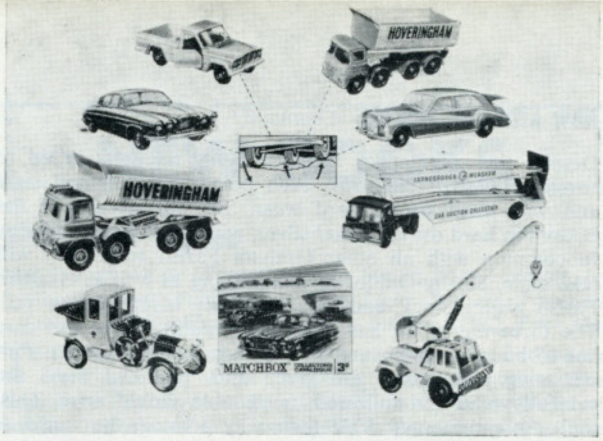
It is, of course, typical of George Mellor's thoroughness when he undertakes a project that he should also produce track and points to give the true narrow gauge look to show off the locos and stock to the best advantage. TT3 track would have done at a pinch, but there is little doubt about the improvement which the correct trackwork gives. The heavier, wider spaced sleepers are ready drilled for pinning down to the baseboard and the nickel silver rail is held to the sleeper strip by metal clips. The track can be made flexible by cutting through the web under the rail on one side of the track and by curving the rail to the desired radius. The price is 5s 6d per yard. The matching (left- or right-hand points (12s 10d) each) follow the now well-established GEM practice of using diecast frog and switch blade units. These have the great advantage of electrical continuity without further wiring and give an exceptionally smooth ride through the crossing. To work them, the obvious choice is a GEM point lever and an Omega wire loop.

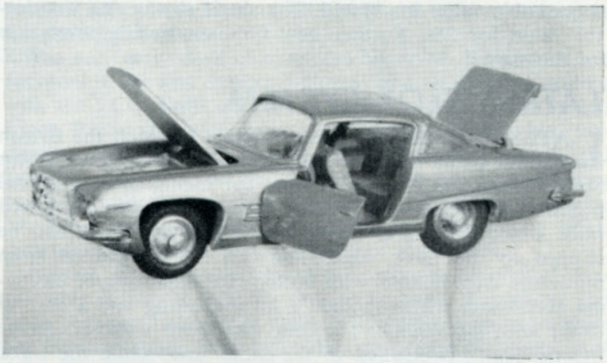
Lastly, and by no means least, George Mellor has introduced a *very* nice white metal kit for that 100+ year old veteran 'Prince', complete with tender (42s). The recommended motor, which is *not* included in the kit, is the Romford 'Terrier' (22s 9d). The body of the locomotive and the tender are again simple exercises in removing a small amount of 'flash' and cementing together. There is an instruction sheet, complete with exploded assembly diagram and details of the colour scheme.

Many modellers who have no narrow gauge line will be tempted to have a non-powered version of this historic loco and some rolling stock in a scenic setting in a showcase, but those who decide to go the whole hog and run a working line need not be frightened of the motorisation. The kit contains all the parts, except the motor, and a second full instruction sheet to tell you how to do it. We found it best to ream the driving wheels slightly before forcing them on to their axles and quartering them, and the tang of a file was used for this process. Because of the deep overhang of the footplate, the kit has been simplified by the omission of connecting and piston rods and crossheads, but those who want to add them should find it reasonably easy. It would be best to make the crossheads out of small squares of plastic, drilled for the slide bars, as this would cope with the insulation question for 2-rail working, the wheels being hub insulated.

Current collection is simple, the loco being one polarity and the tender the other, with an insulated wire from the tender to the insulated brush on the motor. Care must be taken therefore to follow the instructions for the insulation of the drawgear between the loco and the tender.

There has always been a lively interest in narrow gauge among modellers in this country and we have no doubt that the quality of this range of models brought out by George Mellor will do much to stimulate still further our appreciation of these wonderful little lines. Knowing Mr Mellor, we are sure that he will not rest on his laurels and we look forward eagerly to any further introductions he may make in this new scale. *M.H.B.*





Top: *A selection of some of the new Matchbox models for* 1964. Above: *Corgi's fine model of the Ghia L6.4.*

SPACE-SAVING TRACKWORK

IT is unusual for mass-produced model railway firms to go beyond the generally-accepted basic trackwork requirements of right- and left-hand points, diamond crossing and straight and curved rails of varying lengths. Graham Farish are the exception, and they are really going to town with their Formoway track. Their latest productions—the 2 ft radius three-way point, and the 3 ft radius single slip—were seen for the first time at the Model Rail and Road Hobby Show, described in our November, 1963, issue, and early production samples have been submitted to us for review by BMW Models of Wimbledon, who have supplies.

These two new items are real space-savers, since in effect they each combine the virtues of two points. The three-way point can, for instance, be visualised as a left-hand and right-hand point combined, and it is most useful for leading into a bank of sidings in a locomotive depot or goods yard where space is limited. The single slip is a combination of a single point and a diamond crossing and can, like its prototype, be used in a number of situations. Both these points are 'fiddly' things to make by hand, and Graham Farish are to be congratulated on making such a good production job of these items.

The track bases are specially moulded in dark brown plastic, with the frogs and check rails moulded *in situ.*

Continued on next page

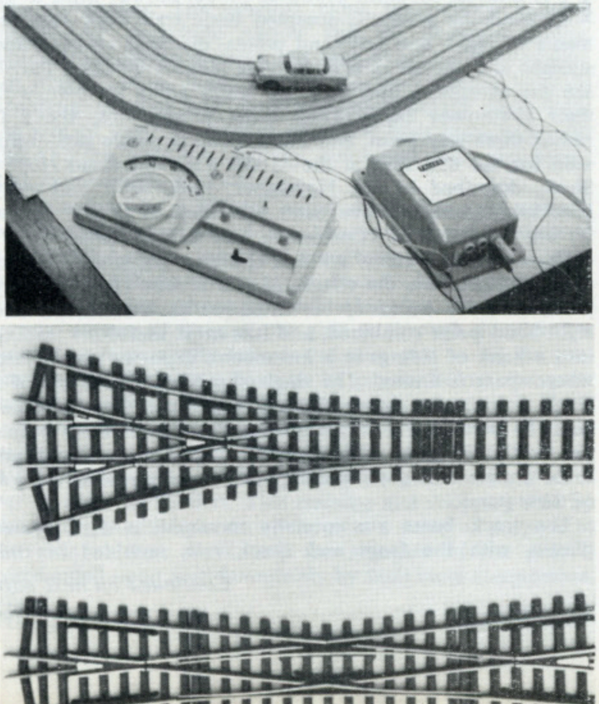
New kits and models—*Continued*

Despite the clear space between every sleeper (spaced to correct BRMSB standards) each point is strong and rigid and will stand up to hard wear. The rail section is flat bottom in hard drawn nickel silver, with sprung point blades. In common with all other Graham Farish track they will take scale, Horby-Dublo, certain Tri-ang as well as Graham Farish rolling stock, and they are ready wired for two rail. The three-way point has two sets of point blades and care has to be taken to ensure they do not foul each other. Full operating instructions are given and, provided these are carefully read and followed, no trouble should arise. This, the only commercial scale three-way point in the world, is remarkable value for 32s 1d. The single slip is also wonderful value for 28s. Further new Graham Farish points are on the way. *N.S.*

LATEST SLOT SYSTEM

LATEST table-top slot racing system to reach the British market is the new HO scale German Faller Auto Motor Sport system, which can be used for racing or as a model highway. To add to the realism, milestones, reflectors, guard rails, street lights and traffic and advertising signs can be clipped to the track edge. The cars are controlled from miniature dash boards, with buttons for operation of electrical accessories which include a level crossing and a control tower with lap counter for four cars. Two vehicles can be independently controlled in the same lane, while the track is available in two radii, in both single- and double-lane sections.

We were able to try out one of the single-car sets, thanks to the co-operation of BMW Models of Wimbledon. Selling for £2 19s 6d, it comprised a track oval of ten dual-lane sections, a Mercedes 220 and a control dashboard. (The transformer necessary costs 34s 6d, and can run up to eight cars.) We found that the well-made miniature Mercedes ran extremely satisfactorily and had a good performance. The electric motor and pick-up contacts are particularly pleasing. A larger set is available at £5 19s, and comprises a Mercedes 220, an Opel Kapitan, two dashboards, and guard rails and piers for a simple overpass. A variety of different packages of track is also available, comprising different lengths of rail. *D.R.*



Car, track, control panel and power unit from the new Faller slot system (top), *and Graham Farish three-way point and single slip.*

MAKING MILLIONS

PRODUCTION of the ever-popular Matchbox models is now running close to an amazing output of $1\frac{1}{2}$ million pieces weekly. Some advance details of new models to be produced during 1964 have been released, as one of our pictures this month shows. Several of these models will not be available until much later in the year, but the first two to be released are the Rolls-Royce Phantom V and the Jeep pick-up truck, both at the slightly higher price of 1s 11d each. The 1 : 74 scale Rolls has opening luggage boot, spring suspension (a new Matchbox feature), windows, seats, steering wheel, and silver-grey finish. It is $2\frac{1}{8}$ in long. Also to 1 : 74 scale, the Jeep pick-up truck is $2\frac{7}{8}$ in long, and has opening doors, front suspension, windows, seats and steering wheel.

Starting with the Jeep, illustrated in the top left-hand corner of our photograph, and working round anti-clockwise, the other forthcoming models illustrated are the Mark 10 Jaguar, eight-wheel tipper truck, 1912 Packard Landaulet, Jumbo crane, four-car transporter, Rolls-Royce Phantom V and the smaller version of the eight-wheel tipper truck. The new Matchbox suspension system is also shown (centre), together with the new 1964 catalogue which, in 32 full-colour pages (price 3d) shows over 140 items. *D.R.*

DE-LUXE MODEL

CORGI have really gone to town with their latest release —a model of the Ghia L6.4, one of the world's most exclusive cars. This $4\frac{1}{2}$-inch-long model has an amazing number of features, and sells for 8s 6d. Just about everything that moves on the body of the real car is reproduced on this Corgi model. The doors open, and have press-fit interior trim. The engine cover is rear hinged and when raised discloses a reasonably-detailed facsimile of the Chrysler V8 engine. The rear luggage boot also has an opening lid, and a ribbed floor, but the most praiseworthy feature is the interior. The two individual front seats have adjustable backrests, there is a central instrument console topped by a reflecting rear-view mirror, and even a dog (a Corgi, of course!) on the rear parcel shelf.

Other features include jewelled headlamp reflectors, Glidamatic spring suspension, front and rear screens, steering wheel, and 'chrome' bumpers and radiator grille. *D.R.*

CROSSED LINES

IN our review last month of the excellent range of Eggar-Bahn narrow gauge railway items, we mistakenly said that they were imported by BMW Models of Wimbledon. In fact the British importers are Richard Kohnstam Ltd, of 78 White Lion Street, London, N1, who distribute to various retailers, among them BMW Models. We apologise for getting our lines crossed and any inconvenience it may have caused. Richard Kohnstam also inform us that S. N. Beattie and Co Ltd, 1 Broadway, London, N14, have been appointed repair agents for Great Britain for Marklin and Faller Auto Motor Sport, and all repairs should be sent to them direct.

Letters to the Editor

Letters to the Editor can only be answered in the magazine. Readers whose letters are published each receive a free Airfix plastic construction kit of their choice. We are always pleased to receive your comments and pictures, which will be considered for publication. Submitted material and pictures can only be returned if accompanied by a stamped addressed envelope, and the Editor cannot accept responsibility for safe keeping of any such contributions, neither does he necessarily agree with comments expressed by correspondents in the letters column.

Herald markings

I WAS most pleased to see the excellent article in your December issue regarding the colour schemes for our Dart Herald aircraft.

I would like to point out a few alterations that have occurred since the information was supplied. The last word of the name 'Tentera Udara Diraja Persekutuan' should now be 'Malaysia' to correspond with the change in name from 'Royal Malayan Air Force' to 'Royal Malaysian Air Force'. The position of this name is also incorrect; it should now appear below the cockpit in 6 in letters extending aft starting directly beneath the rear extremity of the window frame. The letters are 5.5 in above the dark blue cheat line.

The Royal Malaysian Air Force have ordered eight series 401 Heralds, not four as reported, of which one was delivered on November 1.

D. E. Westcott, Public Relations Department, Handley Page Ltd, London, NW2.

We are indebted to Messrs Handley Page for their correction to our notes. Our drawing was based upon the manufacturer's. It at least has an historical flavour by recording what might have been!—Ed.

Taken to task

I WAS delighted to read of the new Liberator kit in your November issue, as I flew these machines in the 1939/45 war in the Far East. I shall be building my model Liberator in RAF South-East Asia Command colours.

I would take you to task over the photograph accompanying the review. The side-gun hatches never opened in the manner shown. They opened inwards, swinging vertically from a hinge along their top edges. To spoil the inward rush of air through the large openings, deflector plates, operated from inside the fuselage, were fitted at the leading edge of each hatchway on the outside of the aircraft.

Occasionally, the hatches were opened without the deflector plates being swung-out, and I could tell many humorous stories of the results of items being thrown out under these circumstances.

F. W. Cooper, Fawley, Southampton.

Help wanted

LAST year I wrote to you regarding a Mk1 Anson, G-AMDA, and I thought that your readers might be interested to hear that it has joined Mosquito TA179 in the Skyfame Aircraft Museum at Staterton.

The Mosquito was used in the film '633 Sqdn' and is now 'G' of 613 Sqdn RAuxAF. This is the aircraft flown by S/Ldr (now AVM) Bateson in a raid on Gestapo Headquarters.

G-AMDA, as soon as a gun turret can be found for it, will be coloured as an aircraft of 206 Squadron which shot down two German aircraft while on a trawler protection flight flown by P/O Henderson.

Both the above aircraft will shortly be joined by an Oxford (G-AHTW) ex Wolverhampton. It will be repainted to represent aircraft of No 2 FTS at Brize Norton in the 1940-1941 period. The painting of this aircraft will be carried out at Elstree.

May I appeal to your readers for help? We have tried all the usual sources for a gun-turret for the Anson to no avail. But the same type of turret was fitted to the Admiralty Special Duty Pinnace (60 feet) and it is rumoured that there are a couple of Pinnaces wandering around still so equipped. If anyone knows of one would they please contact me. The museum is closed for the winter and will open again in the spring.

P. Wood, SATCO, The Aerodrome, Elstree, Herts.

FULL UP!

OWING TO extreme pressure on editorial space this month (largely because of extra practical features) we have had to condense our letters into one page. We will do our best to make up for this next month.

Wrong way round

THANK you very much for your new-style AIRFIX MAGAZINE, which is now even better than before.

I would, however, like to point out a mistake in the model of the Hawker P1127 shown on page 107 of your December issue. The outrigger wheels have been placed on the wrong way round and when retracted would point forwards.

Michael Walker, Lydney, Glos.

Sorry for the mistake. This aircraft has now been grounded!—Ed.

Wrong wingspan

I WOULD like to point out that as the Airfix model of the Liberator is to 1:72 scale, the wingspan should be 18⅓ inches and not 11¼ inches as stated in December Airfix news.

F. P. Olekson, Stamford, Lincs.

Quite correct.—Ed.

Endorsement

I HASTEN to endorse the suggestion by Mr. J. Leslie Scott of Inverness, in the December issue of AIRFIX MAGAZINE.

I have four 'Darings' two 'Devonshires' and four 'Cossacks'. I found that decals of the right shape and size to fit 'Nubian', 'Decoy' and 'Hampshire', and the others were unobtainable in Malta. I tried to paint the pennant numbers using a tapered match but the result, I regret to say, was a mess.

I am sure Airfix will let us have a frigate some time or another (the sooner the better, please) and both myself and other 'flotilla minded' collectors or modellers will find themselves in the same difficulty all over again. Extra decals as suggested would be a boon to all.

J. P. Scicluna, Birkirkara, Malta.

BR SCARABS—*Continued*

transluscent plastic, but in many examples it is dark grey or black.

Another conversion that can be carried out on the Airfix Scammell Scarab is to change the cab and bonnet shape of the mechanical horse to represent the earlier type of tractor used by all four pre-nationalisation railway companies—LNER, LMS, GWR and SR. It is believed that all these earlier examples have now been withdrawn, but large numbers were taken into BR stock and were to be seen until comparatively recently in BR red and cream livery.

Construction follows the kit instructions except for items 1, 3 and 4. I found it easier to construct the chassis first and offer it up to the finished cab at final assembly. I started first by cementing together the two halves of the cab (parts 5 and 6) and put them aside to set. While they were setting I completed assembly and painting of the chassis. The front wheel was put in place at this stage.

The forward part of the bonnet was cut away from a point just behind the number plate and just forward of the slots holding the front bumper. The cut was made vertically and finished square with a fine file. A piece of Plastikard to cover the front of the bonnet was cut to fit over the front wheel. The forward part of the chassis (part 2) has to be cut at this stage at a point immediately behind the front two axle bearers. Removing these two bearers unfortunately means that the front wheel falls out, but the wheel can be cemented in place or, if you prefer your wheels to revolve, the card covering the front of the bonnet can be cut with two strips either side of the wheel arch which, after assembly, can be curved around the axle and cemented to the rear axle bearers. Diagram B illustrates this point.

The sides and rear of the cab assembly should be filed flat and as square as the thickness of plastic will allow. This reduces the width of the back of the cab and in plan form reduces the forward taper of the body. The windscreen pillars should be removed and a new flat windscreen, made up of Plastikard, fitted in place. The gap between the base of the windscreen and the top of the bonnet is best filled in with plastic putty and filed to shape.

Two pieces of Plastikard shaped to the curve of the roof should be cemented in place at the front over the windscreen and at the back of the cab. A groove should be filed in the back of the cab to ensure that the card fits flush with the back. It is necessary to file the cab roof to follow the shape of the new roof, which is cut from Plastikard and cemented in place. The unglazed cab side windows are deeper and wider and should be filed to shape. A thin strip of Plastikard forms the top window frame.

Perhaps the trickiest part of all is the front wheel spat. This is made of Plastikard cut roughly to a funnel shape (diagram C refers) and cemented in place on the front of the bonnet. The top of the spat should be fixed first and the base can be carefully squeezed between the fingers and held in place until the cement sets. I used the Airfix front bumper (part 7) on my own model, but strictly speaking a smaller bumper should be fixed to the front of the bonnet either side of the wheel spat. The sidelights (parts 20 and 21) can be cemented in place, and a small piece of plastic cut from the Watneys drain hose (part 47) cemented at the top left-hand corner of the windscreen represents the old rubber bulb type hooter.

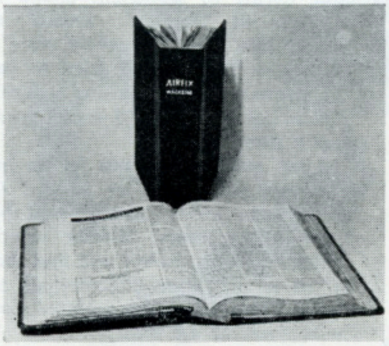
Many of the collection and delivery vans used by the former railway companies used tarpaulin sheets for sides and roof. These can be represented by a crumpled sheet of tissue paper stretched over a card frame and painted with black Indian ink. The card frame consists of a sheet of card bent to shape with thin strips of card cemented in place to represent the open framework. The framework shows through when the Indian ink dries the tissue taut.

I added a further touch of realism by affixing two miniature advertising posters on either side of the tarpaulin, which should of course also carry the white letters GW.

My own pre-grouping Scammell was finished in GWR livery. Chocolate brown tractor and trailer with cream above the waistline of the tractor, and a cream panel on the lower plank of the trailer side. The chassis is black with red wheel hubs. A 'GWR' monogram transfer (obtainable from EAMES of Reading) is fixed to the bonnet side and 'Great Western Railway' is added to the cream panels on the sides of the trailer. A small GWR monogram is also painted over the centre of the windscreen. The November 1939 issue of the *Railway Magazine* has some excellent photographs of GWR mechanical horses and flat-bed trailers, and typical fleet numbers and registration numbers are C3607, BGX577, and C3509, GUV753. The transport museum at Clapham has an example preserved in GWR livery and its number is 6271, FLL362.

Pen-friends wanted

THE following readers have written to the Editor requesting pen-friends, and interested readers are invited to contact them direct, at the addresses given. William Daniel, (11), Chanel, 1 Brook Vale, Rathfarnham, Dublin, 14, wants a pen-friend in France, Germany, Switzerland or Austria, with an interest in model aircraft and cars. B. Gildea, (27), of 13 Spencer St, Gravesend, Kent, wants to correspond with an American willing to exchange kits and books on cars and railways.



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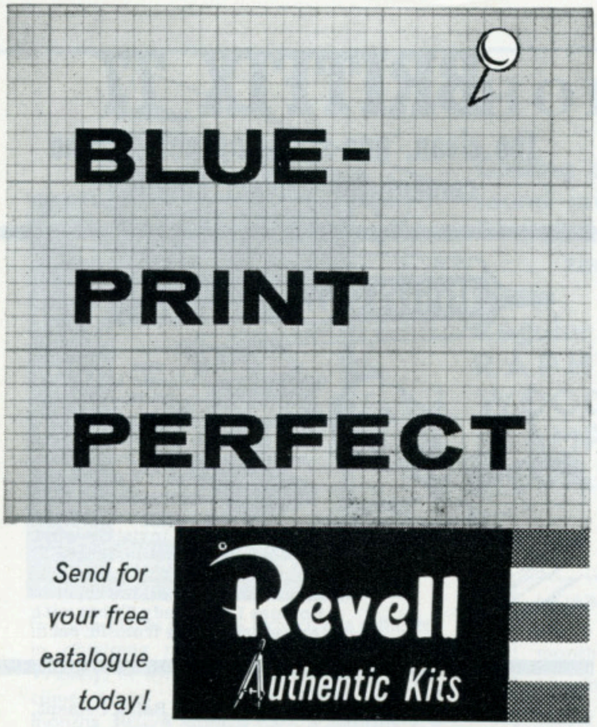

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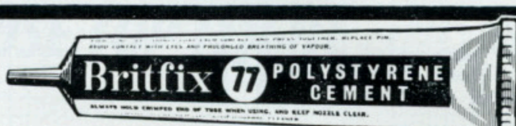

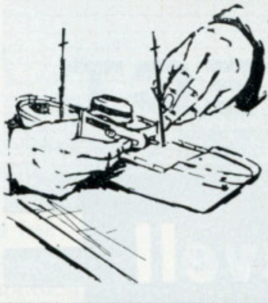

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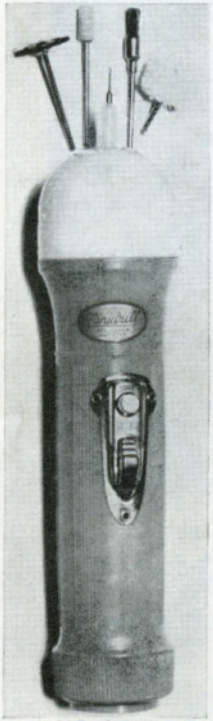

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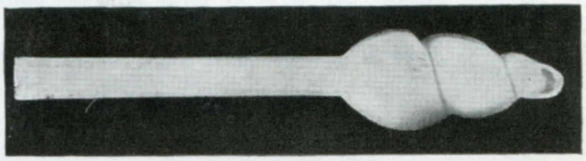

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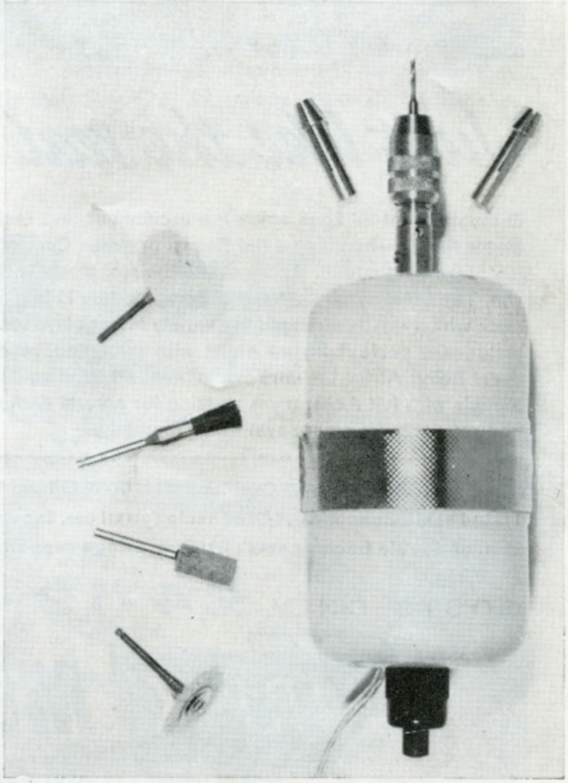

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